PM 6665 Timer/counter

PM 6669 Frequency counter

Service Manual

9499 465 00711
87 06 01 First edition

I&E

Industrial & Electro-acoustic Systems Division

PHILIPS

**Industrial &
Electro-acoustic Systems**

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Important

As the instrument is an electrical apparatus, it may be operated only by trained personnel. Maintenance and repairs may also be carried out only by qualified personnel.

Please note

In correspondence concerning this instrument, please quote the type number and serial number as given on the type plate.

⚠

The counter is marked with this symbol when it is necessary for the user to refer to the manual.

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Printed in Sweden.

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GENERAL INFORMATION

WARNING: These servicing instructions are for use by qualified personnel only. To reduce the risk of electrical shock, do not perform any servicing other than that specified in the Operating Manual unless you are fully qualified to do so.

This counter has been designed and tested in accordance with IEC Publication 348, Safety Requirements For Electronic Measuring Apparatus For Class 1 instruments, and has been supplied in a safe condition. This manual contains information and warnings that should be followed by the user and service technician to ensure safe operation and repair in order to keep the counter in a safe condition.

WARNING: The opening of covers or removal of parts, except those to which access can be gained by hand, is likely to expose live parts and accessible terminals which can be dangerous to life.

The counter must be disconnected from all voltage sources before it is opened.

Remember that capacitors inside the counter retain their charge even if the counter has been disconnected from all voltage sources.

GROUNDING

The counter is connected to ground via a sealed three-core power cable, which must be plugged into a socket outlet with a protective ground contact. No other method of grounding is permitted for this counter. When the counter is brought from a cold to a warm environment, condensation may cause a hazardous condition. Therefore, ensure that the grounding requirements are strictly met.

Power extension cables must always have a protective ground conductor.

WARNING: Any interruption of the protective ground conductor inside or outside the counter, or disconnection of the protective ground terminal, is likely to make the counter dangerous. DO NOT intentionally disrupt the protective grounding.

LINE VOLTAGE SETTING

Before connecting the counter to the line, ensure that it is set to the local line voltage. On delivery the counter is set to either 115 V or 220 V, as indicated on the line voltage selector on the rear panel. If the voltage setting is incorrect, set the line voltage selector in accordance with the local voltage before connecting the counter to the line.

SPARE PARTS

Components that are important for the safety ofthe instrument may only be renewed by components obtained from your local Philips organisation.

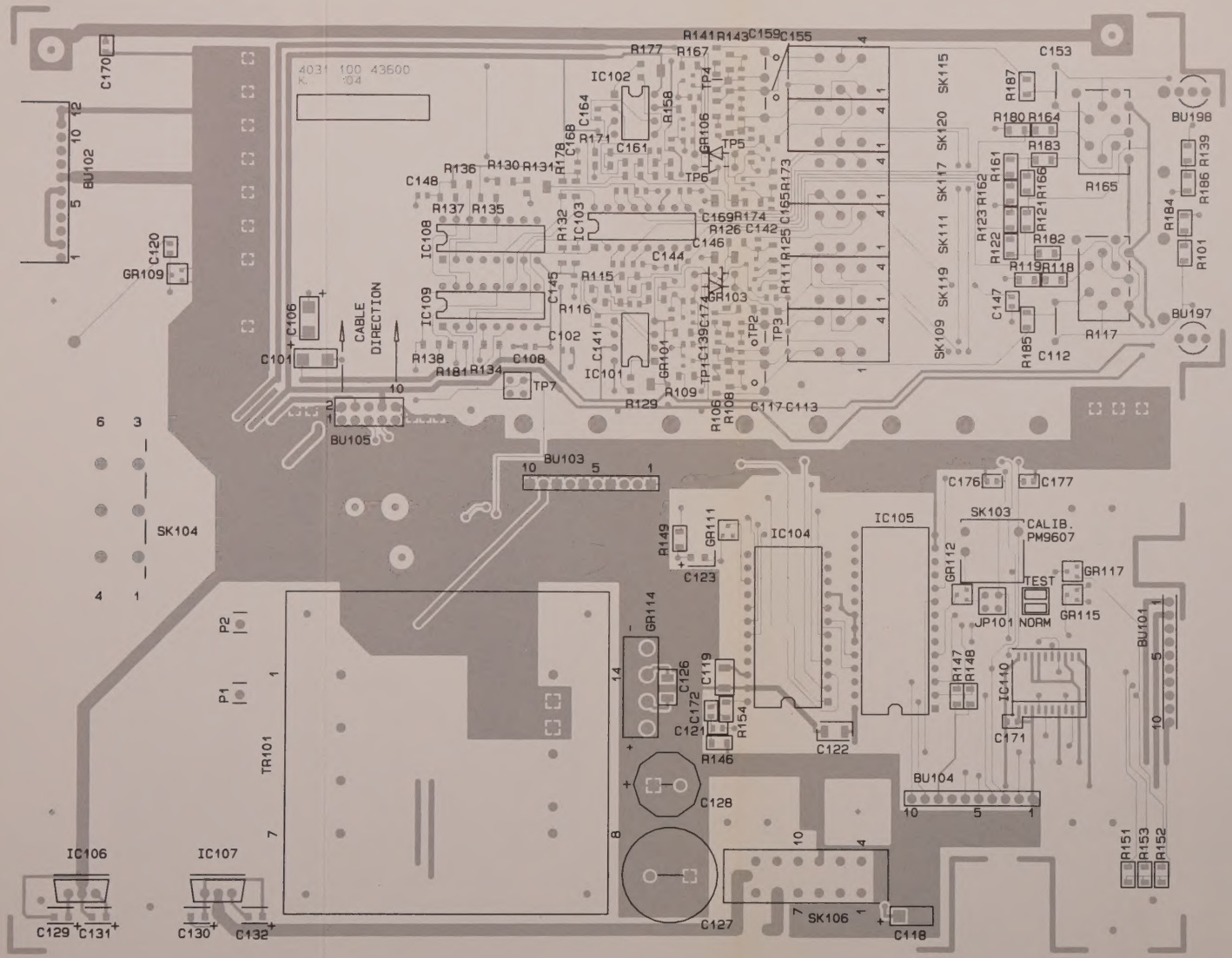
FUSES

The counter is protected by one fuse inside the transformer. This fuse will blow if the transformer is dangerously overheated. The fuse cannot be replaced separately.

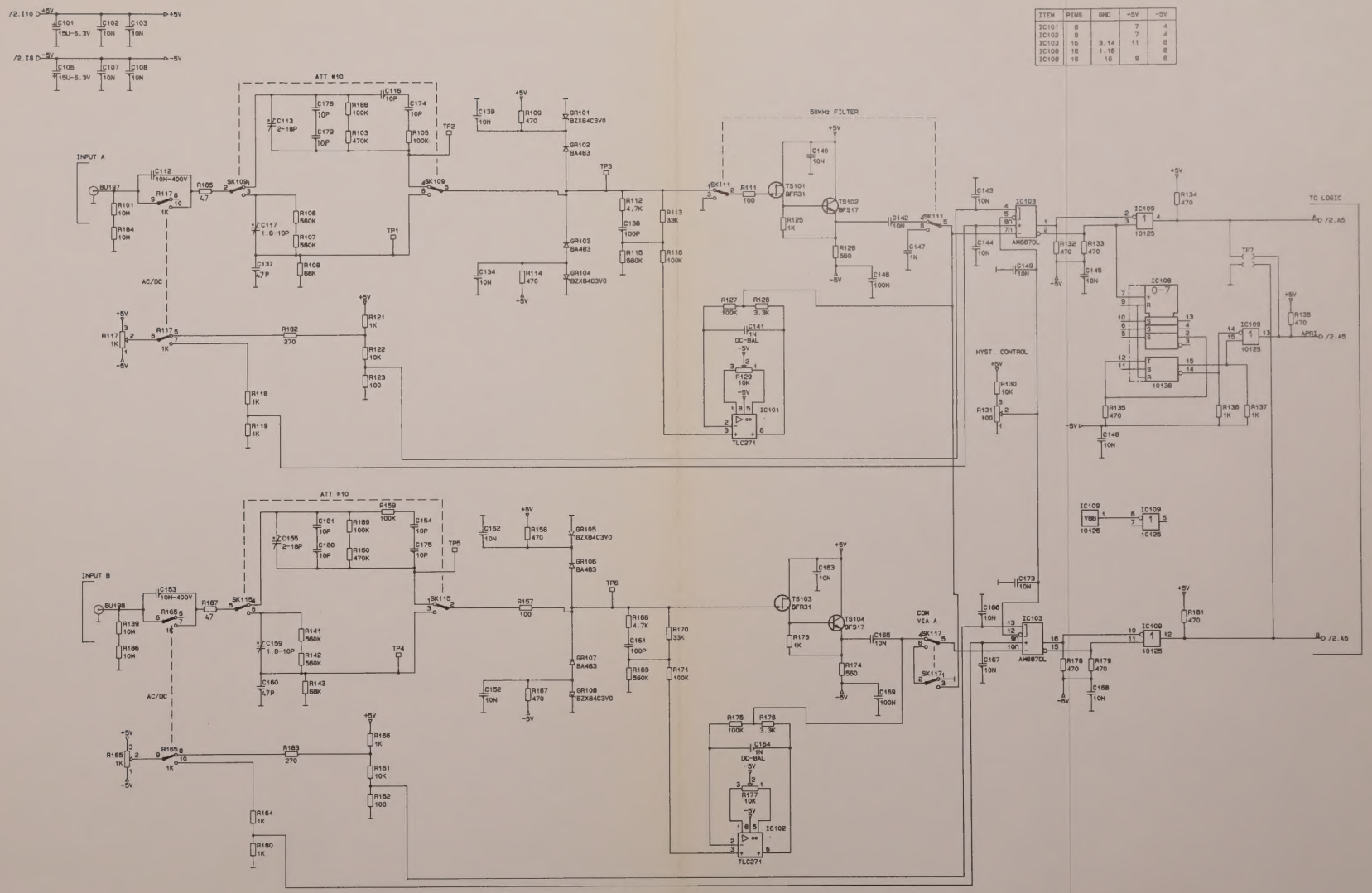
Always replace the complete transformer to ensure that the counter remains safe!

2. Drawings and diagrams

PM 6665 Basic board



PM 6665 Basic board, input amplifier



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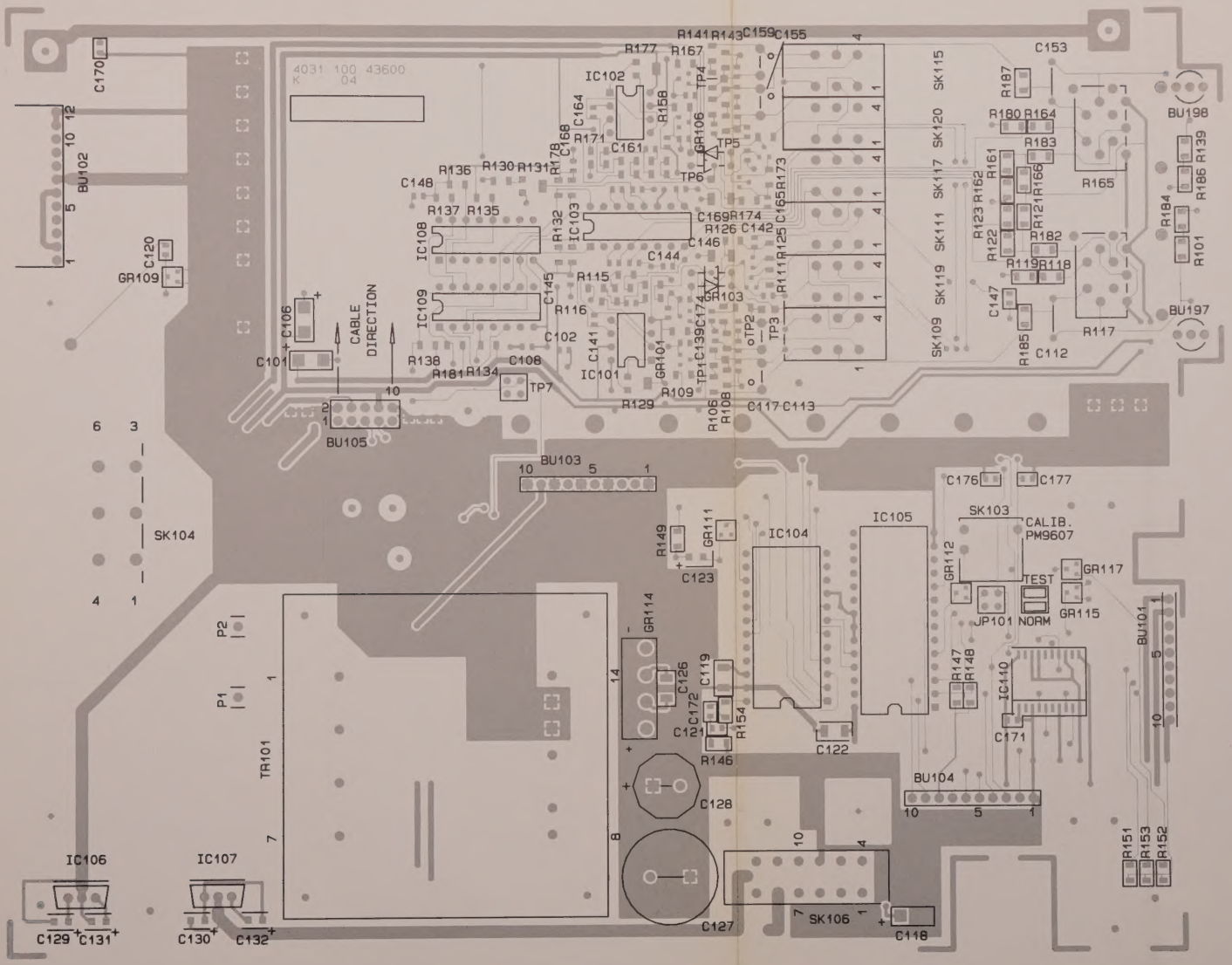
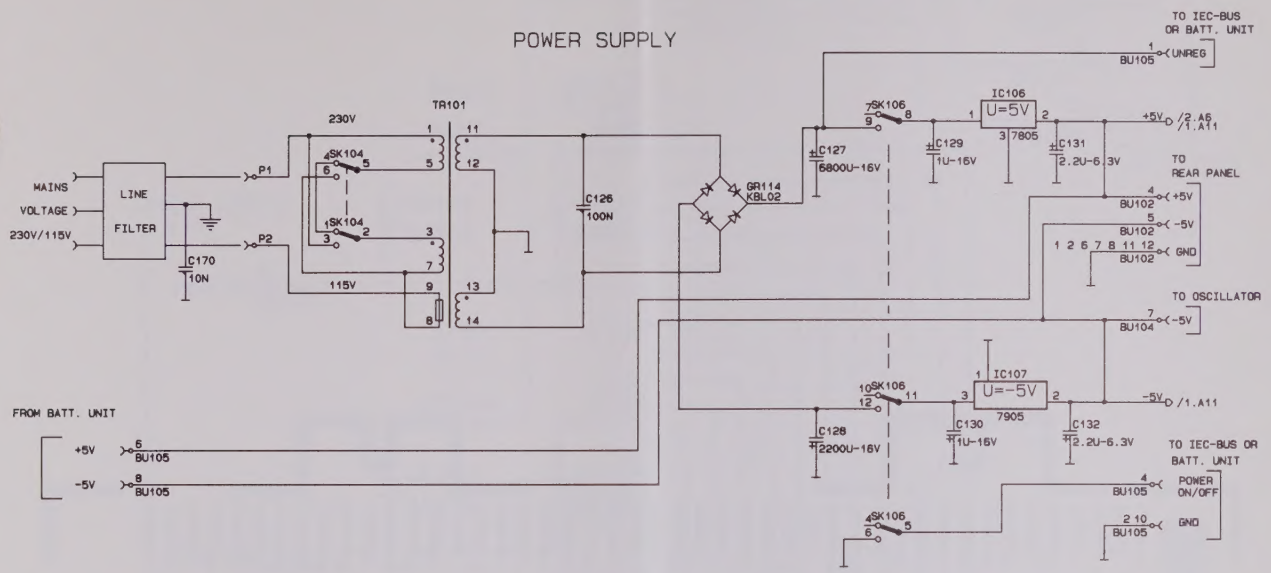
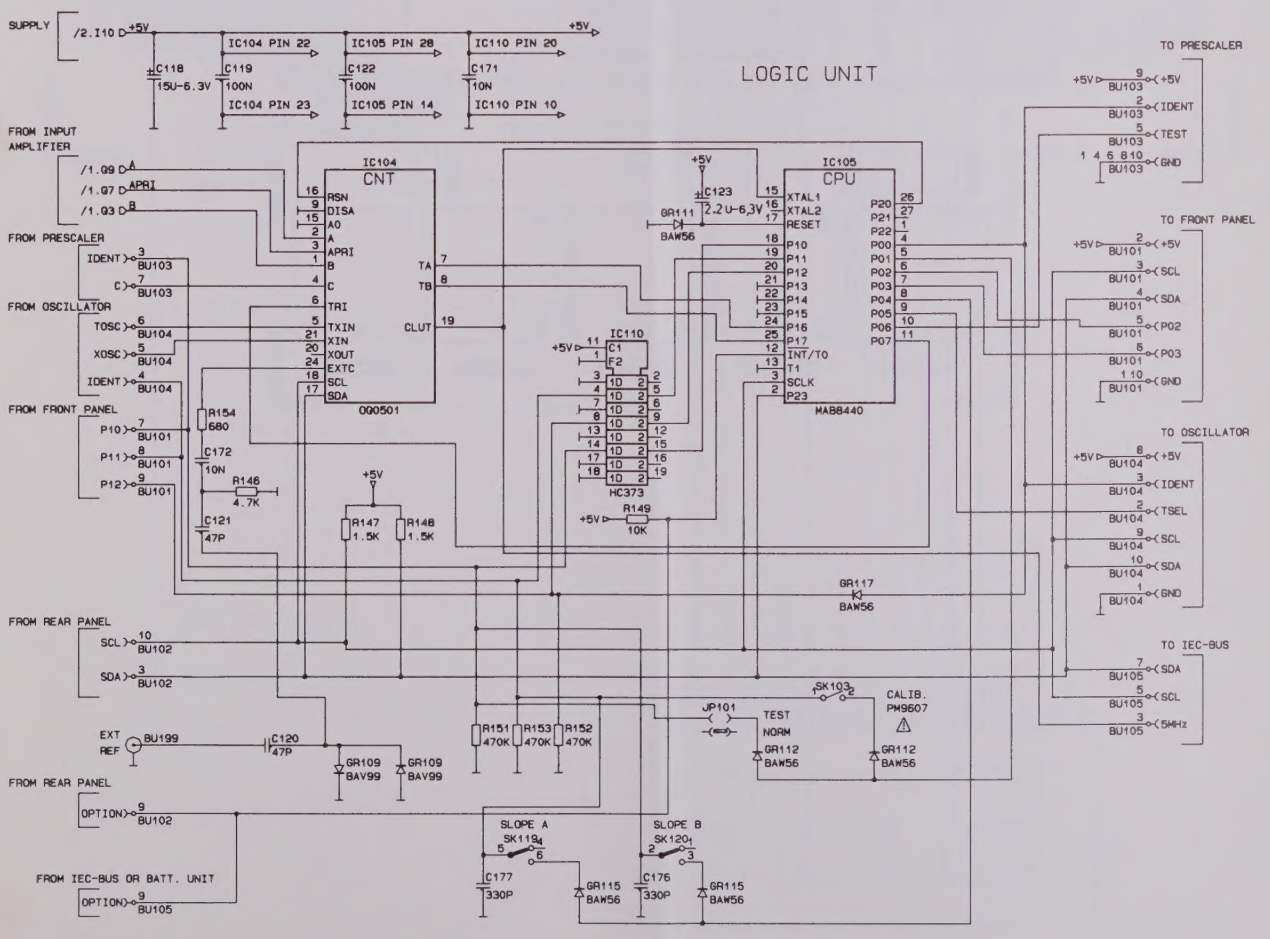
PM 6665 Basic board

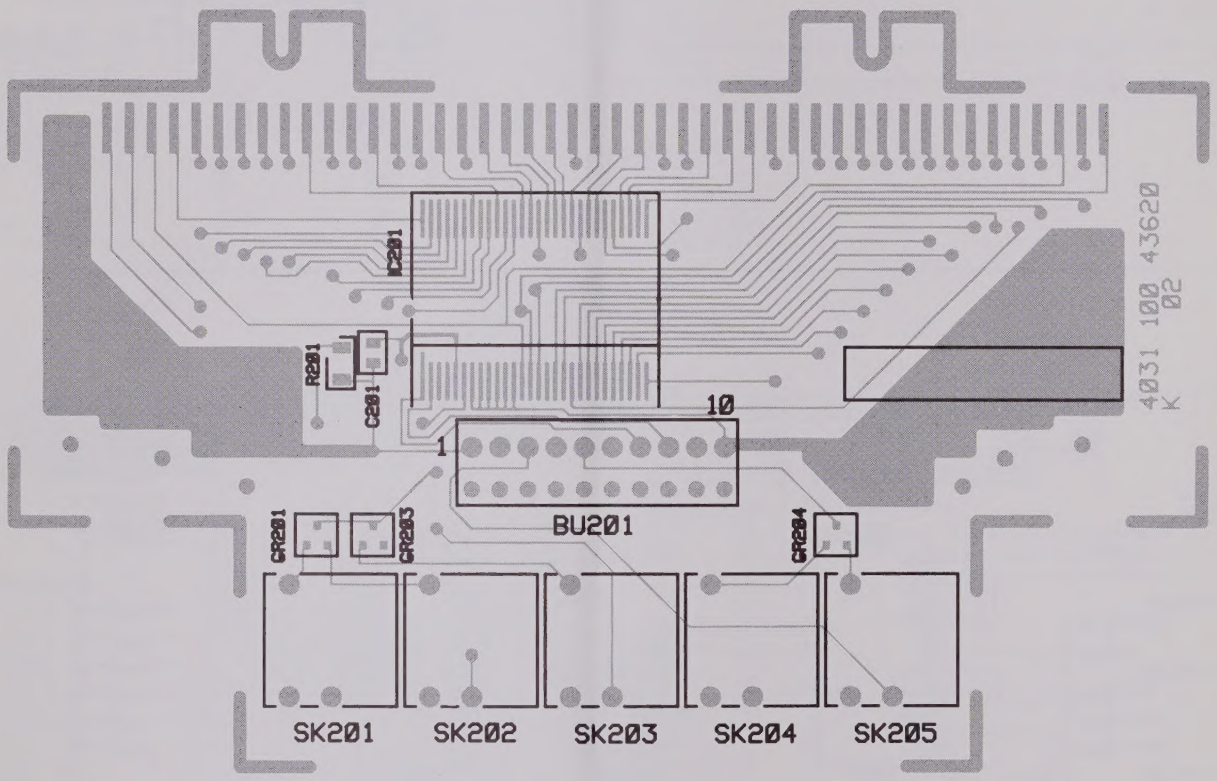


PM 6665 Basic board, power supply and logic unit

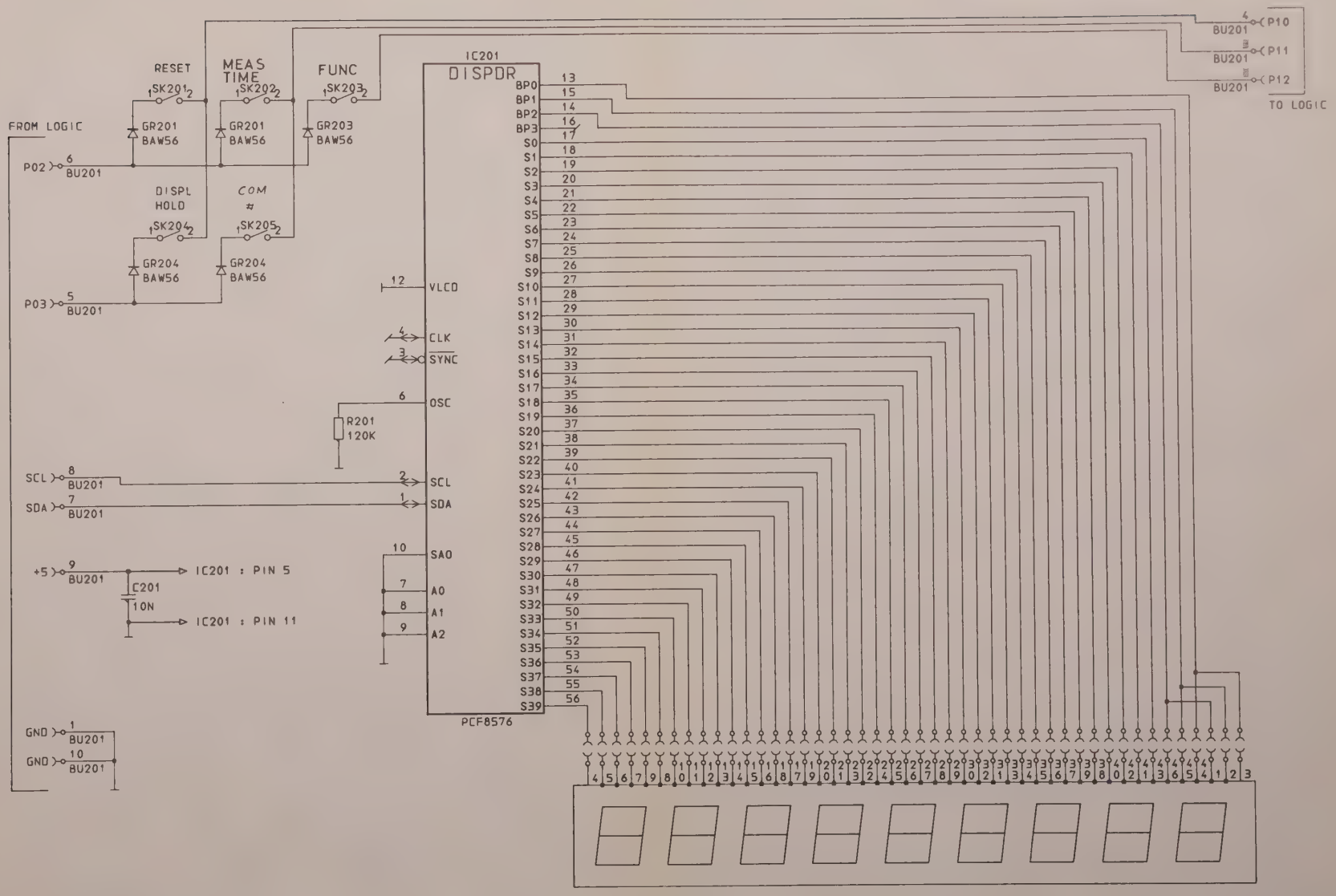




PM 6665 Front panel



PM 6665 Front panel



NO FUNCTION IN PM6665

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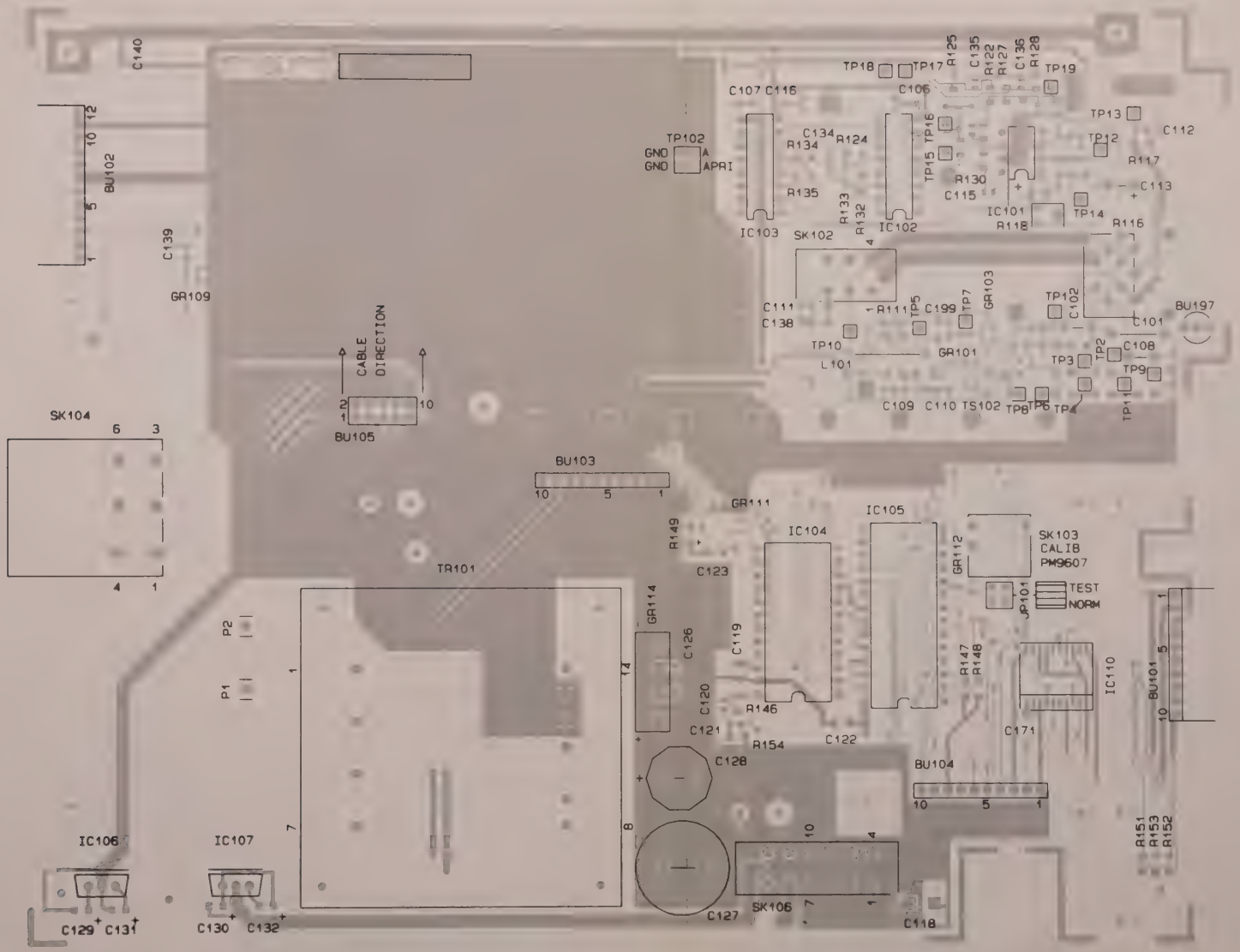
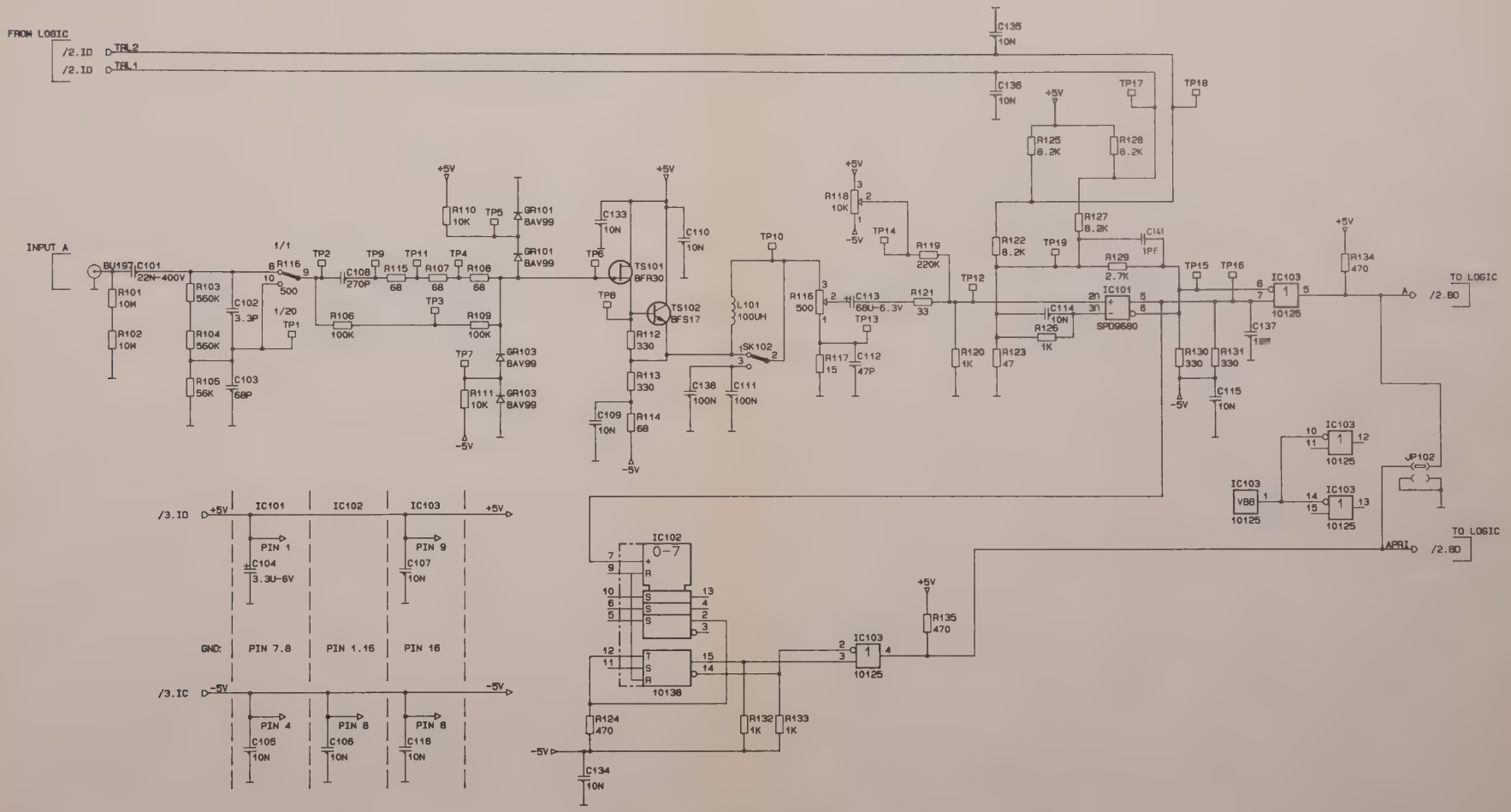
PM 6669 Basic board



PM 6669 Basic board, input amplifier



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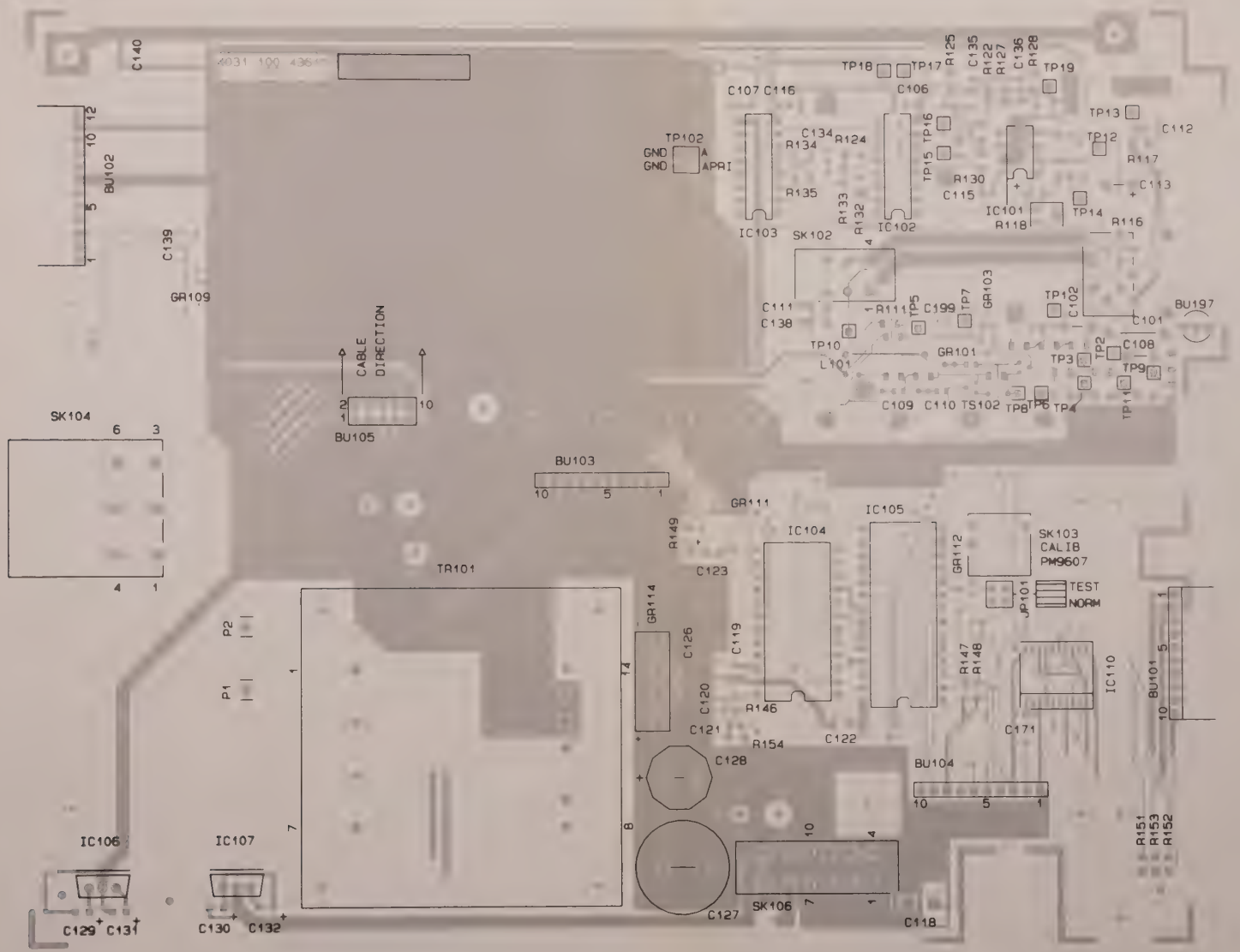
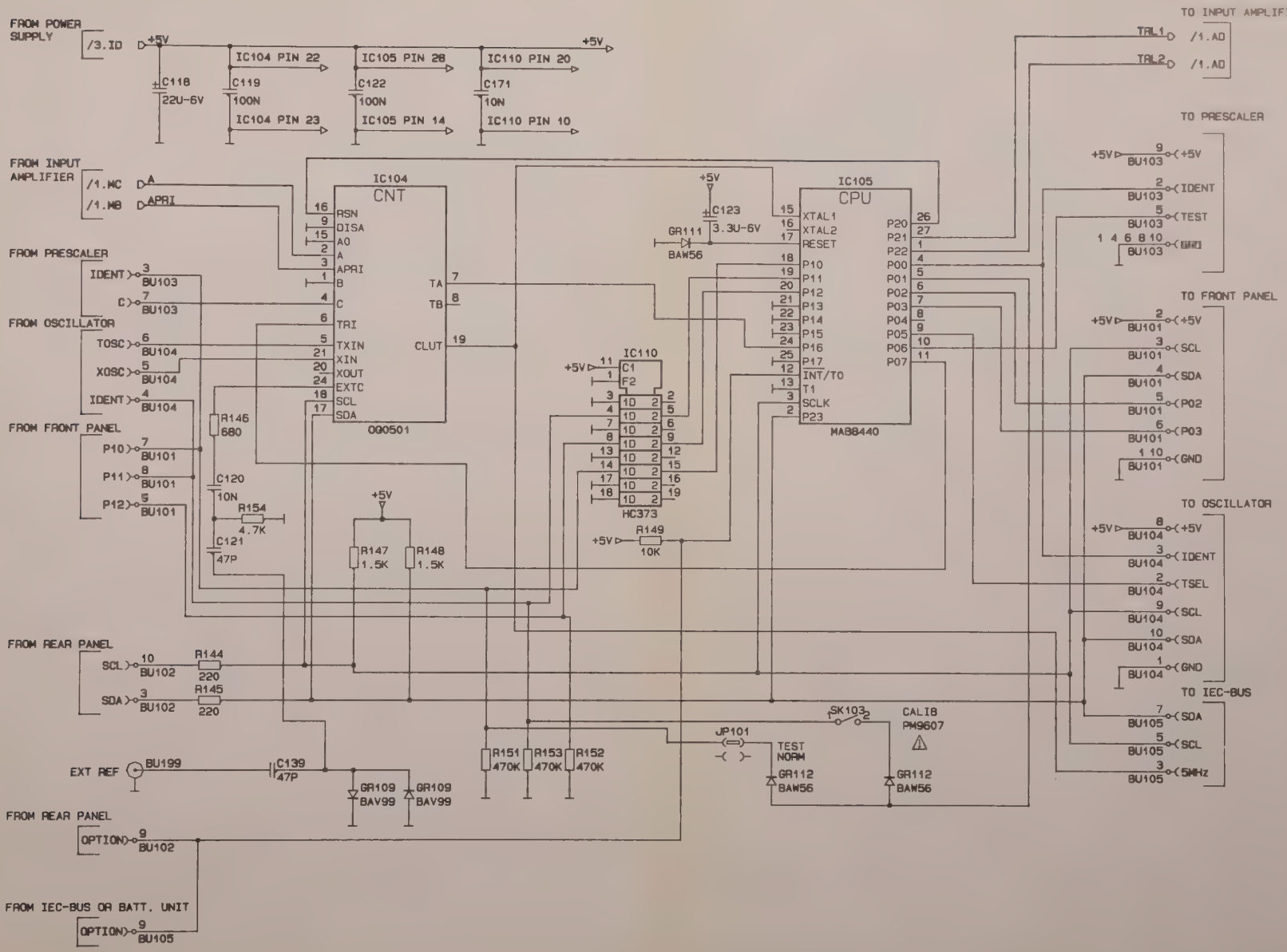
PM 6669 Basic board




FROM POWER SUPPLY
/3.ID
+5V
C118
22U-6V
C119
100N
IC104 PIN 22
IC104 PIN 23
C122
100N
IC105 PIN 28
IC105 PIN 14
C171
10N
IC110 PIN 20
IC110 PIN 10
FROM INPUT AMPLIFIER
/1.MC
/1.MB
A
APRI
IC104
CNT
RSN
DISA
A0
A
APRI
B
C
TRI
TXIN
XIN
XOUT
EXTC
SCL
SDA
TA
TB
CLUT
000501
FROM PRESCALER
IDENT
C
BU103
FROM OSCILLATOR
TOSC
XOSC
IDENT
BU104
FROM FRONT PANEL
P10
P11
P12
BU101
R146
680
C120
10N
R154
4.7K
C121
47P
R147
1.5K
R148
1.5K
IC110
C1
F2
1D
HC373
C123
3.3U-6V
GR111
BAW56
IC105
CPU
XTAL1
XTAL2
RESET
P10
P11
P12
P13
P14
P15
P16
P17
INT/T0
T1
SCLK
P23
P20
P21
P22
P00
P01
P02
P03
P04
P05
P06
P07
MAB8440
R149
10K
TO INPUT AMPLIFIER
TRL1
TRL2
/1.AD
TO PRESCALER
+5V
IDENT
TEST
GND
BU103
TO FRONT PANEL
SCL
SDA
P02
P03
GND
BU101
TO OSCILLATOR
TSEL
BU104
TO IEC-BUS
BU105
5MHz
FROM REAR PANEL
SCL
SDA
R144
220
R145
220
BU102
EXT REF
BU199
C139
47P
GR109
BAV99
R151
470K
R153
470K
R152
470K
JP101
TEST
NORM
SK103
CALIB
PM9607
GR112
BAW56
OPTION
FROM IEC-BUS OR BATT. UNIT

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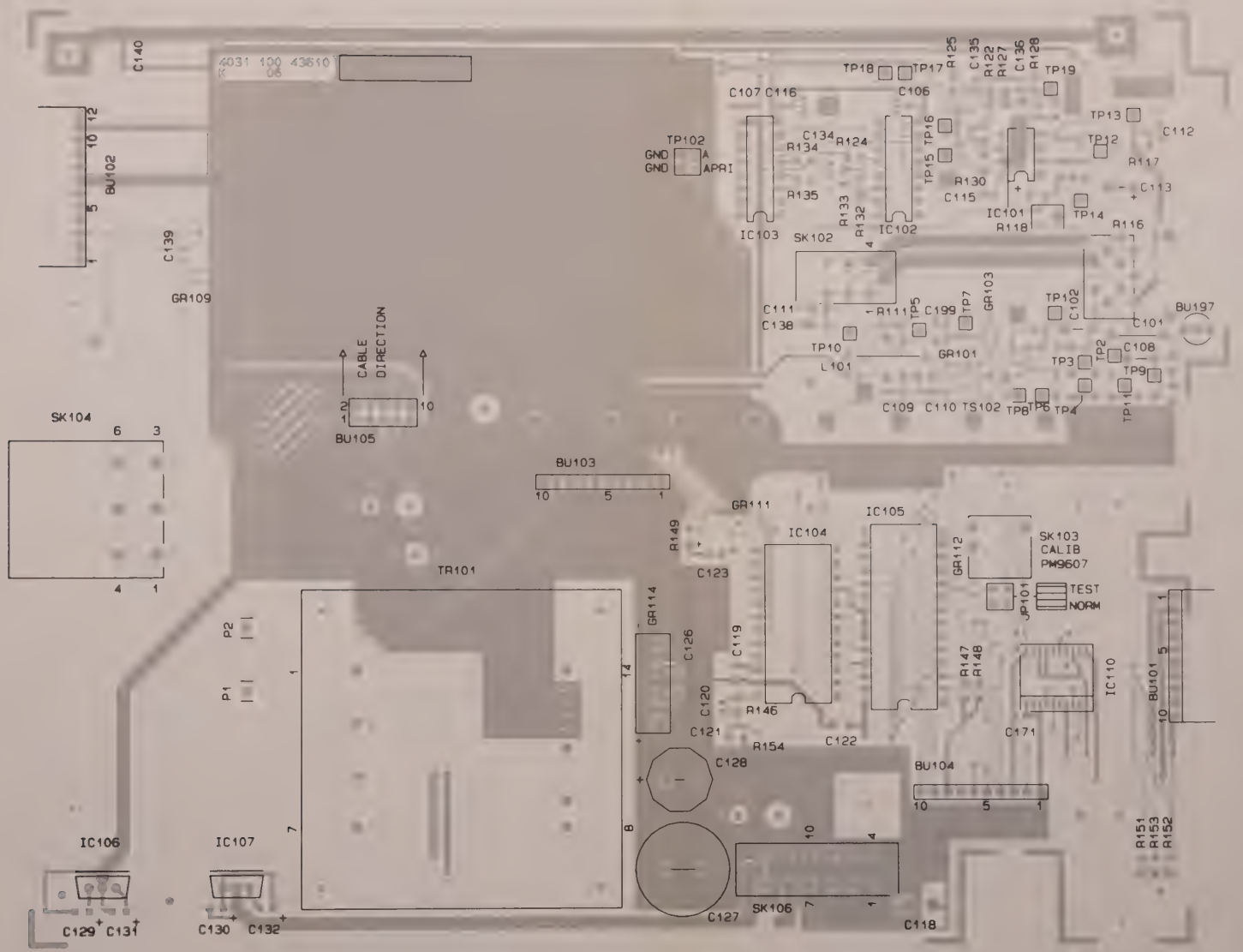
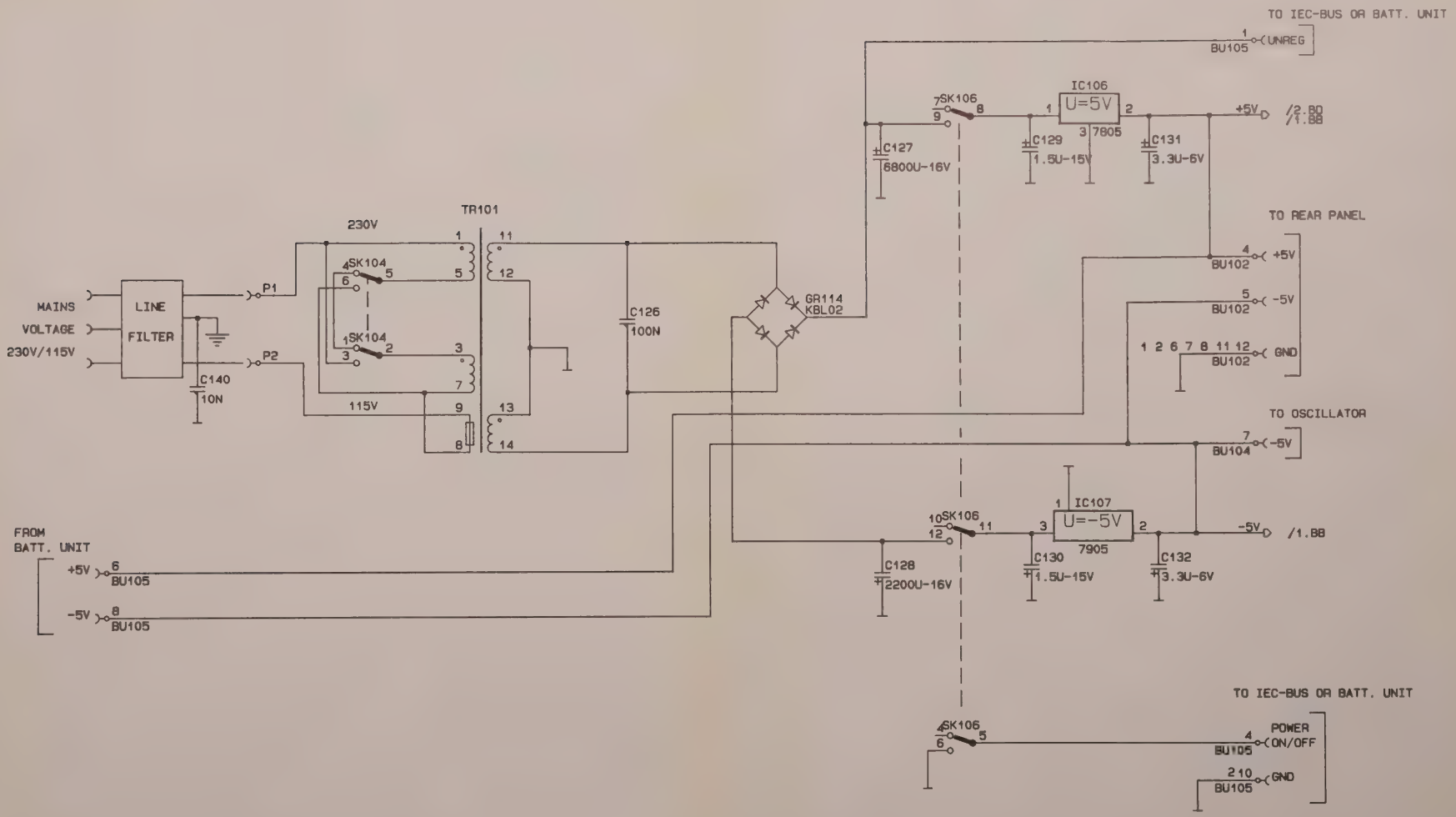
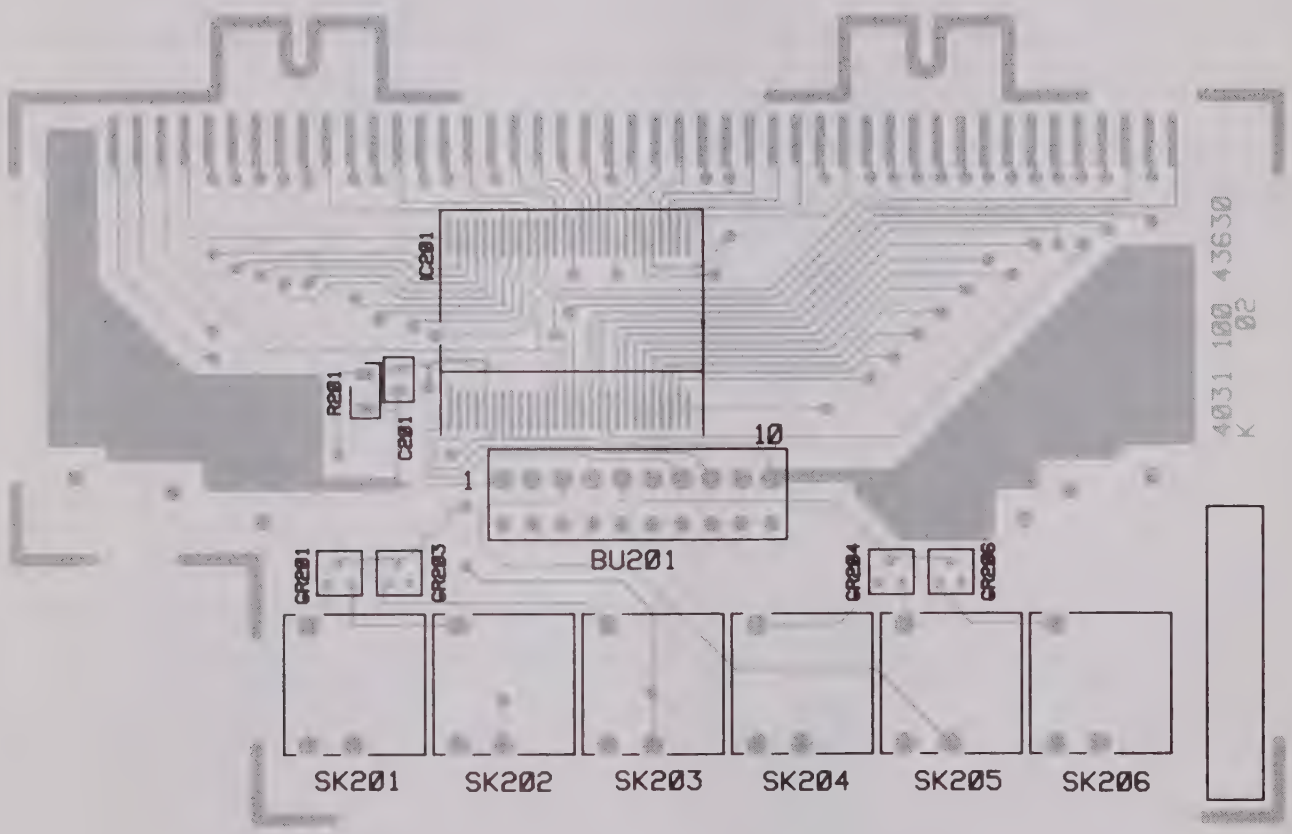
PM 6669 Basic board

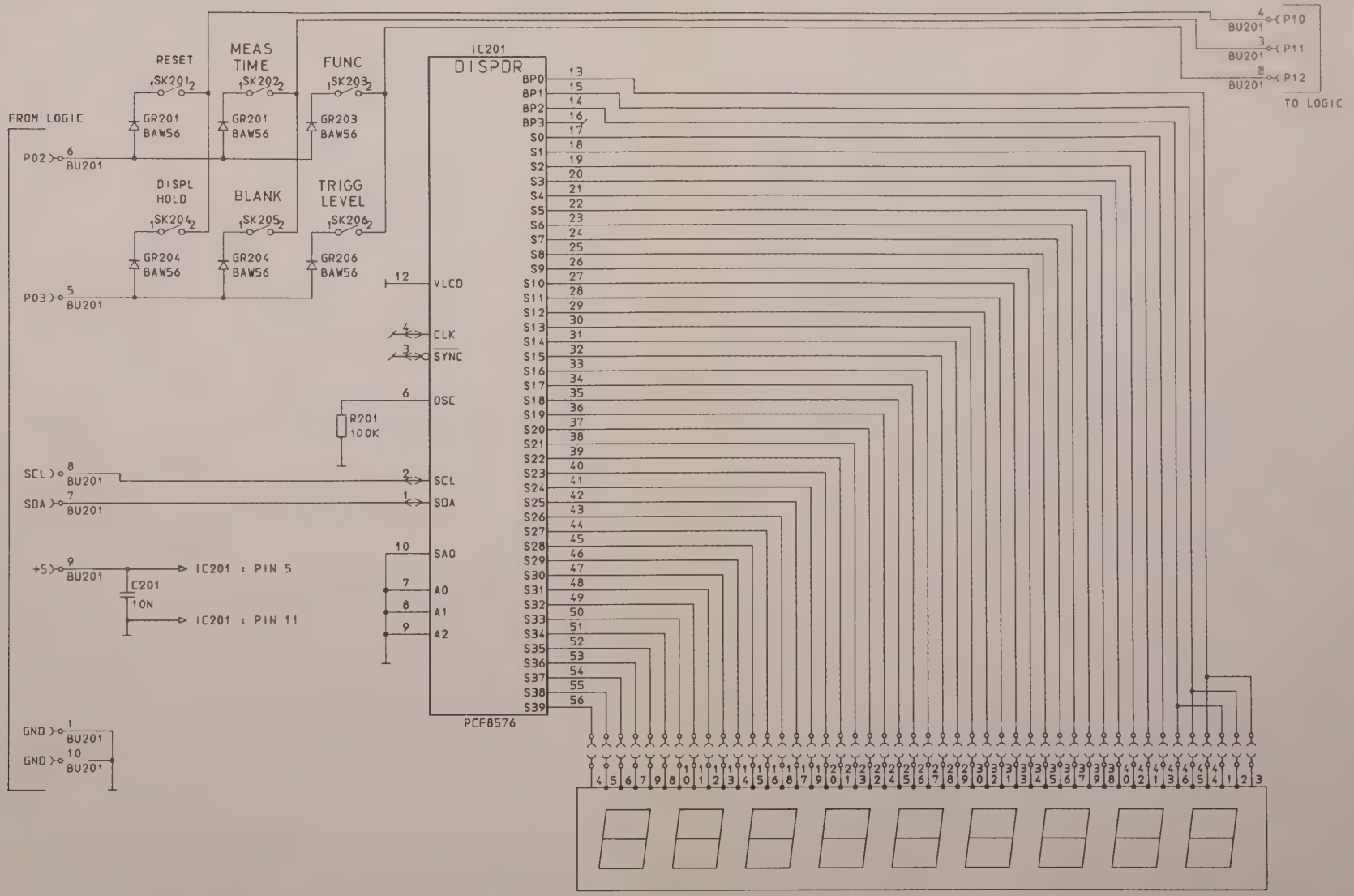


PM 6669 Basic board, power supply

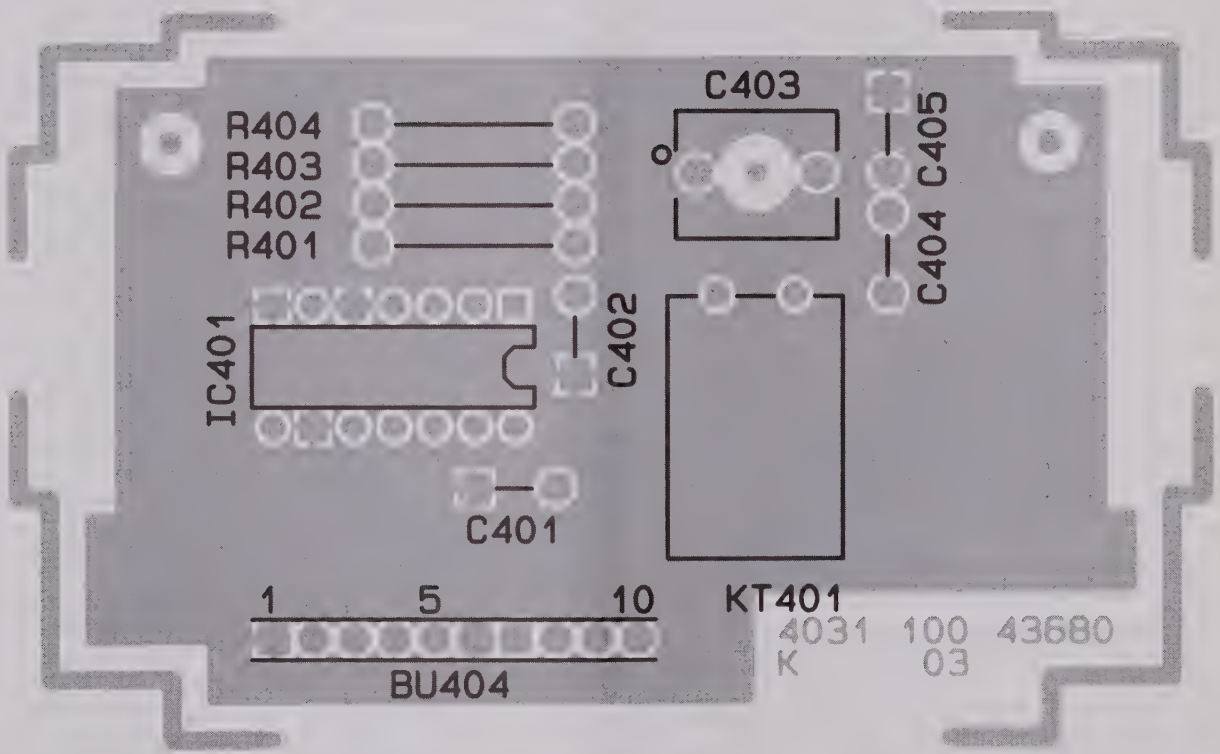


PM 6669 Front panel

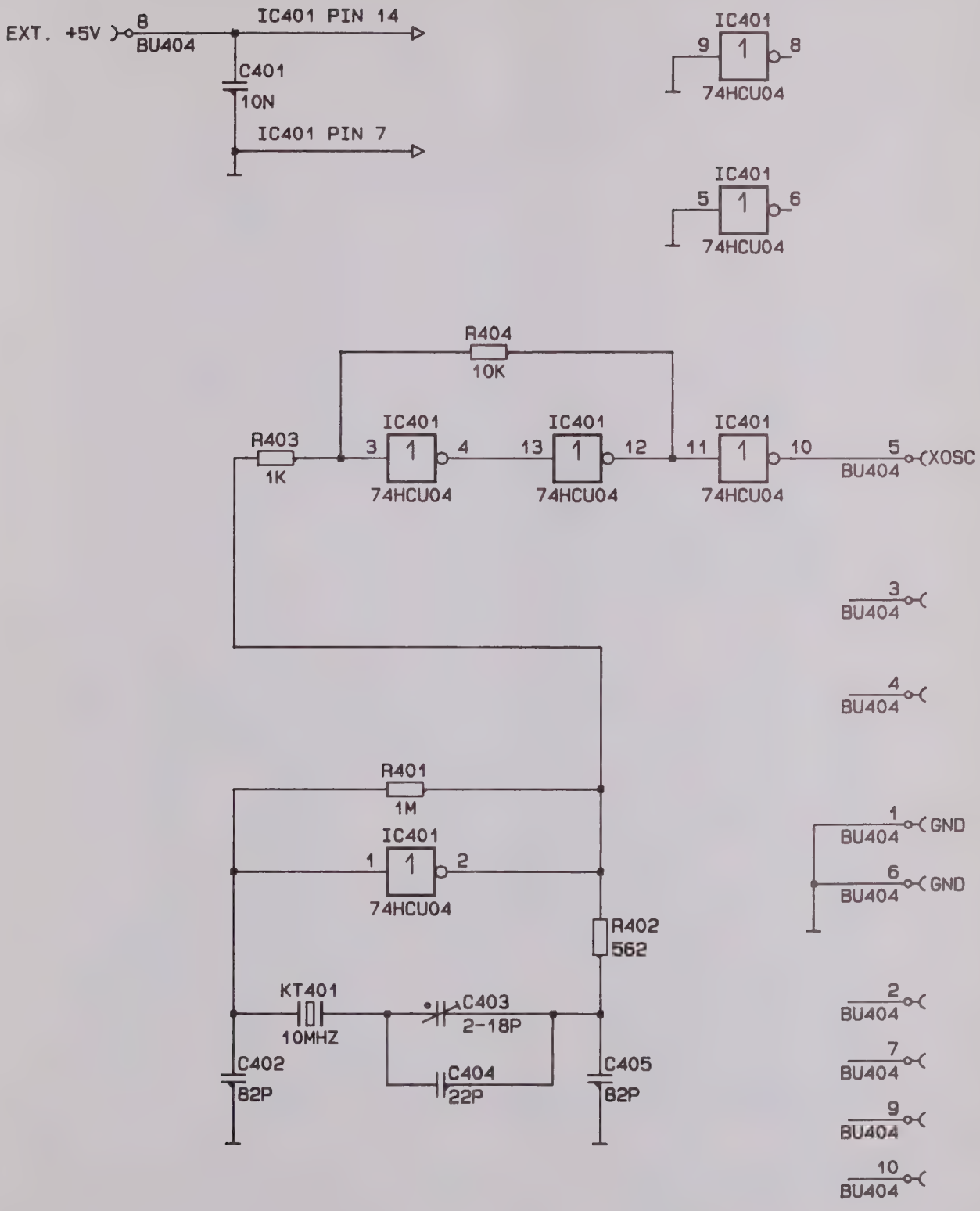



FROM LOGIC
RESET
SK201
MEAS TIME
SK202
FUNC
SK203
GR201 BAW56
GR201 BAW56
GR203 BAW56
P02
6
BU201
DISPL HOLD
SK204
BLANK
SK205
TRIGG LEVEL
SK206
GR204 BAW56
GR204 BAW56
GR206 BAW56
P03
5
BU201
IC201
DISPDR
PCF8576
VLCD
CLK
SYNC
OSC
R201 100K
SCL
SDA
SA0
A0
A1
A2
BP0
BP1
BP2
BP3
S0
S1
S2
S3
S4
S5
S6
S7
S8
S9
S10
S11
S12
S13
S14
S15
S16
S17
S18
S19
S20
S21
S22
S23
S24
S25
S26
S27
S28
S29
S30
S31
S32
S33
S34
S35
S36
S37
S38
S39
+5
9
BU201
C201
10N
IC201 : PIN 5
IC201 : PIN 11
GND
1
10
BU201
P10
P11
P12
TO LOGIC

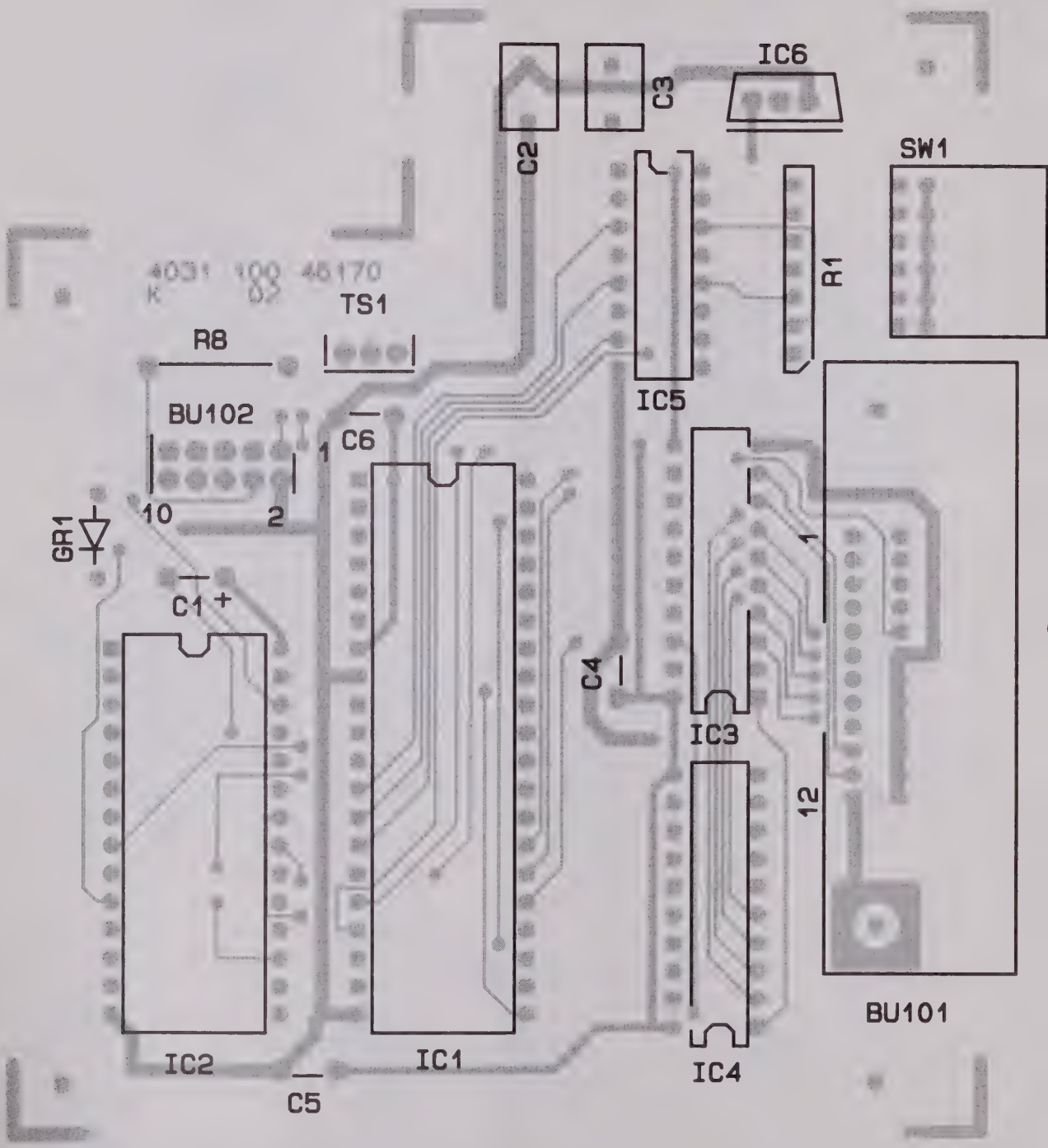
/.1. oscillator (uncompensated-crystal)

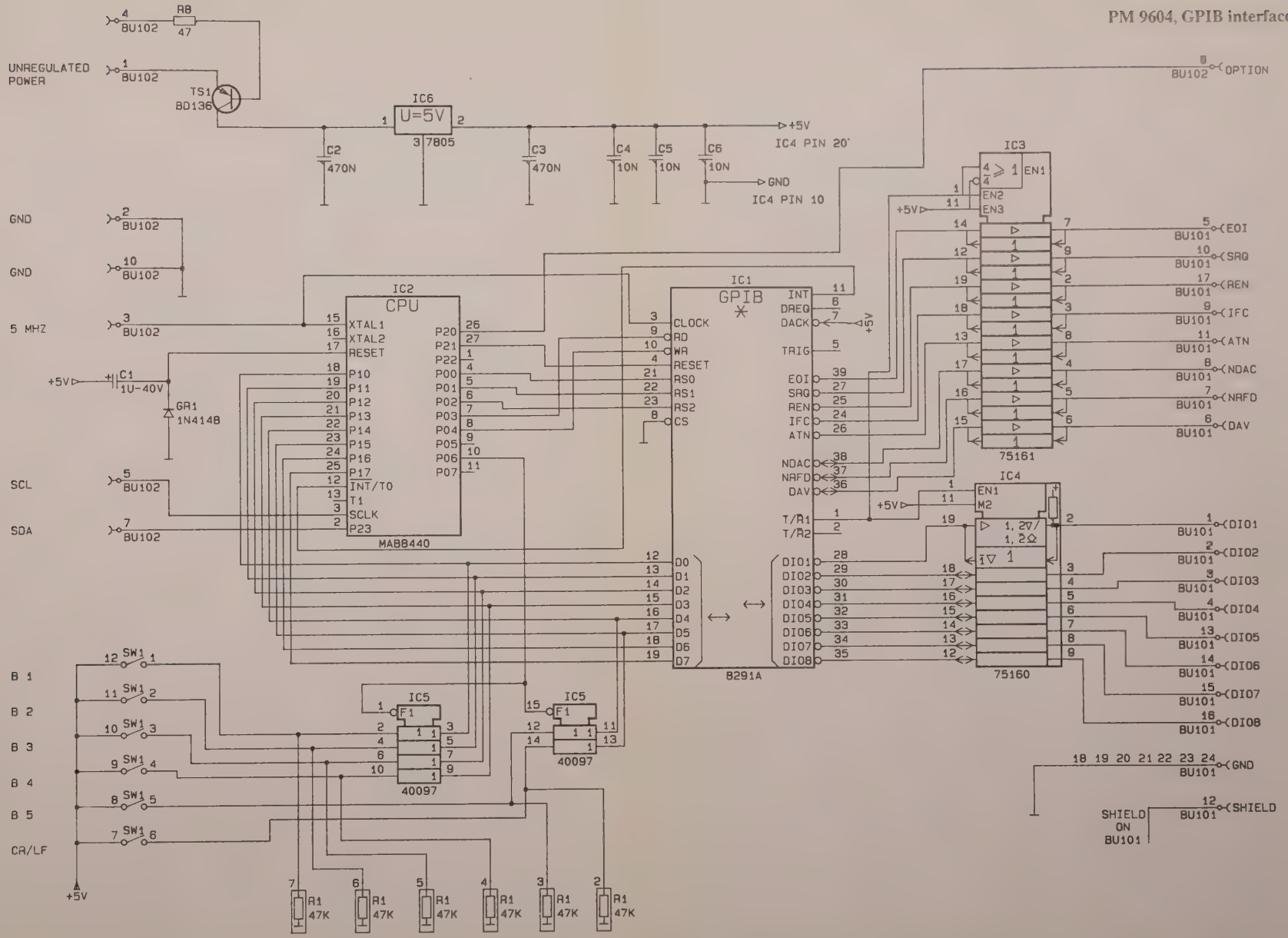


/.1. oscillator (uncompensated-crystal)

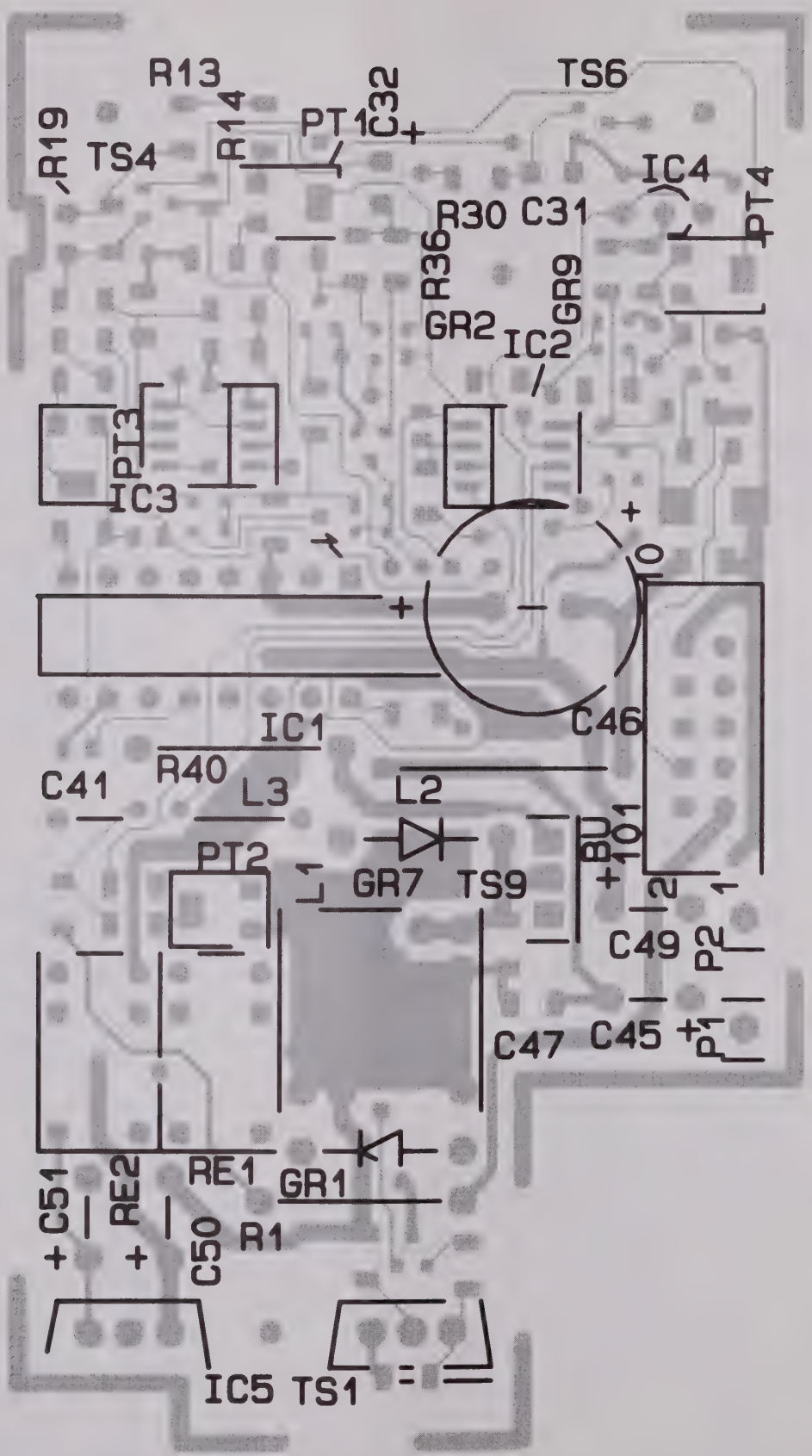


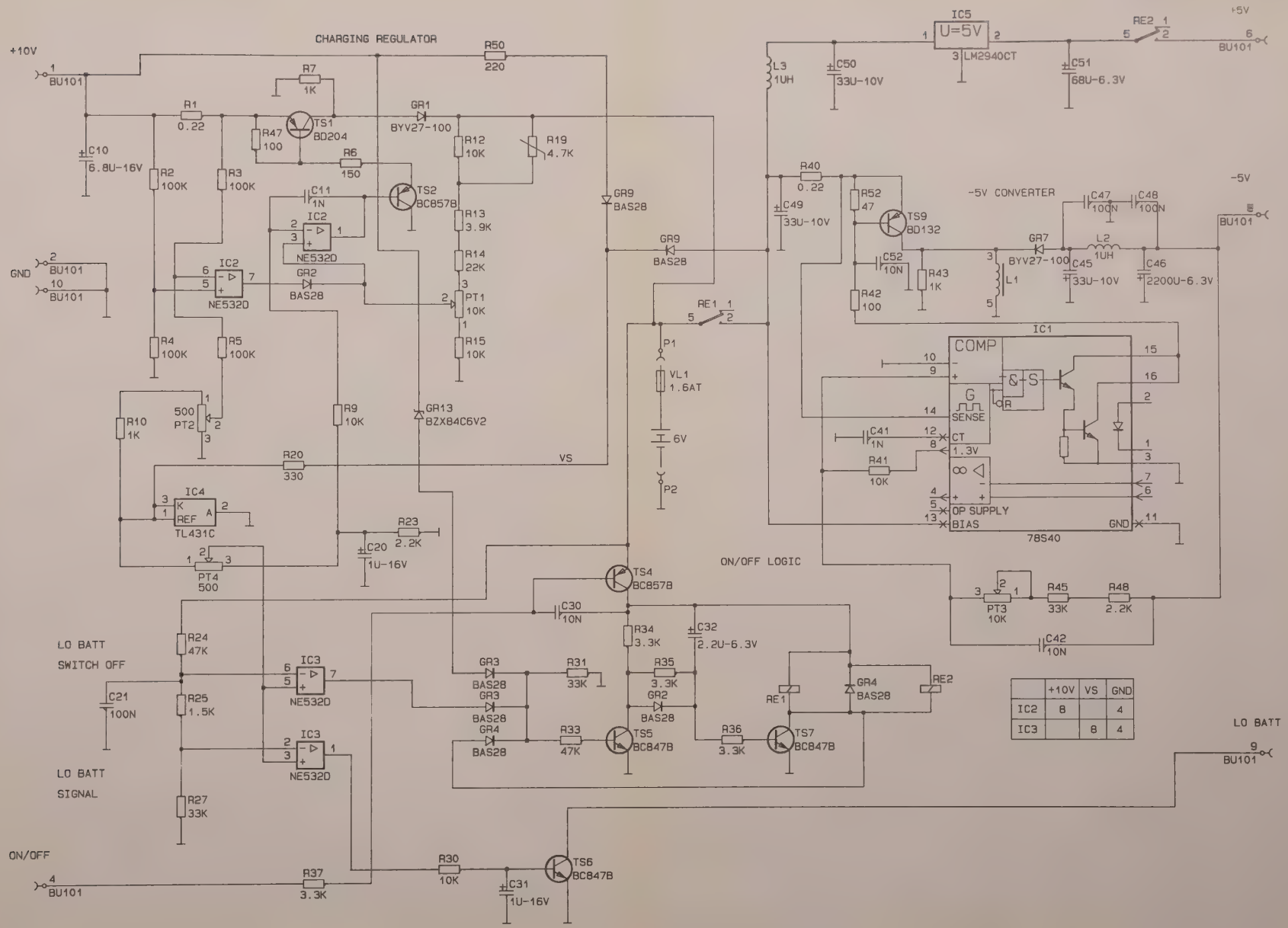
PM 9604, GPIB interface



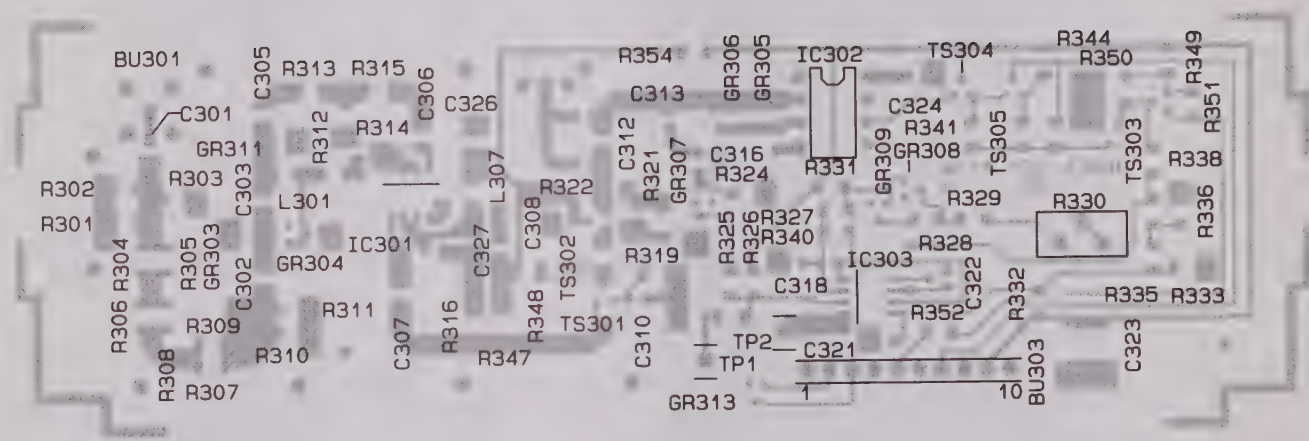

UNREGULATED POWER
TS1 BD136
R8 47
IC6 U=5V 7805
C2 470N
C3 470N
C4 10N
C5 10N
C6 10N
+5V
IC4 PIN 20
GND
IC4 PIN 10
BU102 OPTION
GND
5 MHZ
SCL
SDA
C1 1U-40V
GR1 1N4148
IC2 CPU
MAB8440
IC1 GPIB
8291A
IC3
75161
IC4
75160
EOI
SRQ
REN
IFC
ATN
NDAC
NRFD
DAV
DIO1
DIO2
DIO3
DIO4
DIO5
DIO6
DIO7
DIO8
GND
SHIELD
SHIELD ON BU101
B 1
B 2
B 3
B 4
B 5
CR/LF
SW1
IC5
40097
R1 47K

PM 9605, Battery unit

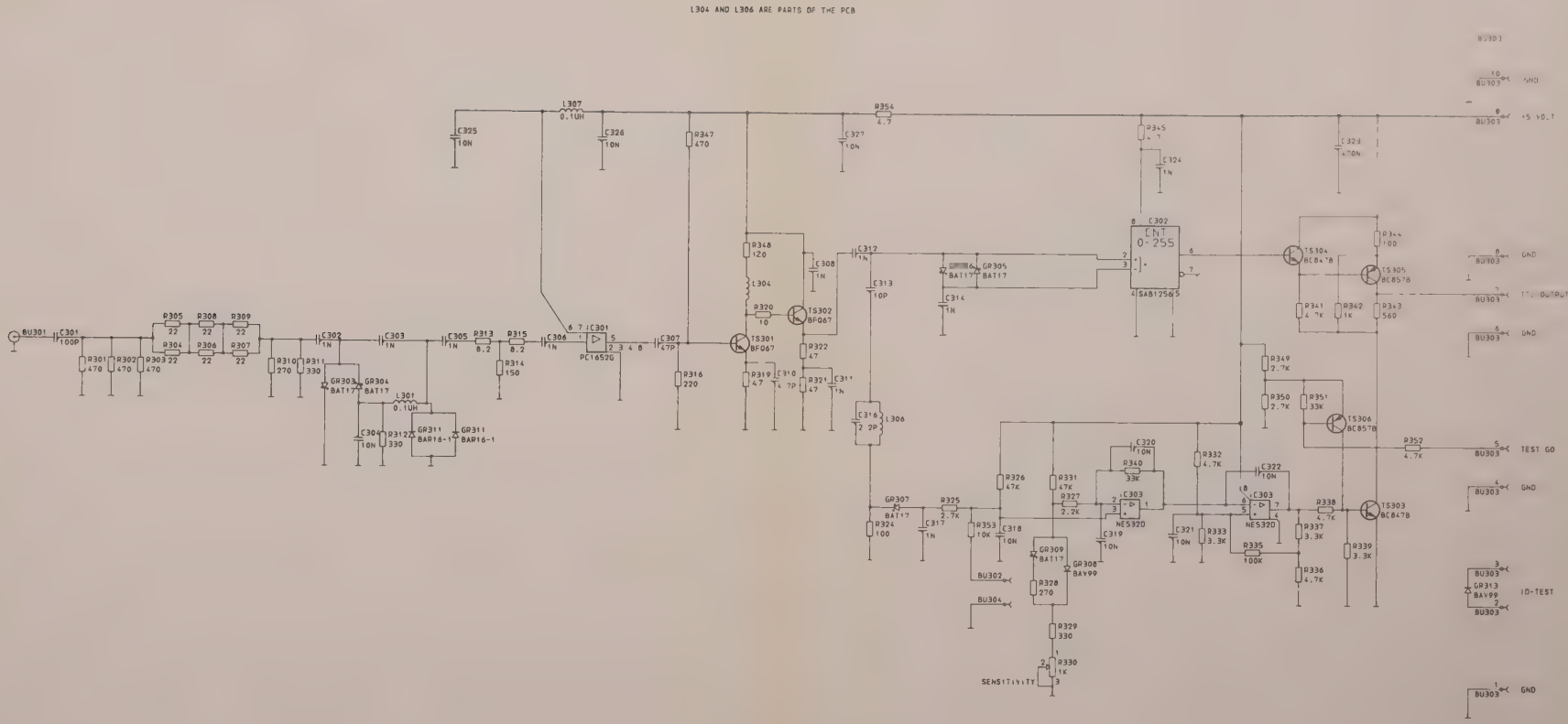



CHARGING REGULATOR
+10V
BU101
R50
220
R7
1K
R1
0.22
TS1
BD204
R47
100
GR1
BYV27-100
R6
150
R12
10K
R19
4.7K
C10
6.8U-16V
R2
100K
R3
100K
C11
1N
TS2
BC857B
R13
3.9K
R14
22K
PT1
10K
R15
10K
GR9
BAS28
IC2
NE532D
GR2
BAS28
GND
R4
100K
R5
100K
R10
1K
PT2
500
R9
10K
GR13
BZX84C6V2
R20
330
VS
IC4
TL431C
R23
2.2K
C20
1U-16V
PT4
500
TS4
BC857B
C30
10N
R34
3.3K
C32
2.2U-6.3V
LO BATT
SWITCH OFF
R24
47K
IC3
NE532D
GR3
BAS28
R31
33K
R35
3.3K
GR2
BAS28
C21
100N
R25
1.5K
GR4
BAS28
R33
47K
TS5
BC847B
R36
3.3K
TS7
BC847B
LO BATT
SIGNAL
R27
33K
ON/OFF
R37
3.3K
R30
10K
TS6
BC847B
C31
1U-16V
ON/OFF LOGIC
RE1
RE2
GR4
BAS28
IC5
U=5V
LM2940CT
+5V
L3
1UH
C50
33U-10V
C51
68U-6.3V
R40
0.22
C49
33U-10V
R52
47
TS9
BD132
C52
10N
R43
1K
R42
100
-5V CONVERTER
C47
100N
C48
100N
GR7
BYV27-100
L2
1UH
L1
C45
33U-10V
C46
2200U-6.3V
-5V
IC1
78S40
COMP
SENSE
CT
1.3V
OP SUPPLY
BIAS
C41
1N
R41
10K
P1
VL1
1.6AT
6V
P2
PT3
10K
R45
33K
R48
2.2K
C42
10N
+10V
VS
GND
IC2
8
4
IC3
8
4

PM 9608, 1.1 GHz HF input



PM 9608, 1.1 GHz HF input



3. Spare parts list

PM6665,-69 DATE: 87-05-12

SERVICECODE	DESCRIPTION			ARTICLE SPECIFICATION
MECHANICAL PARTS				
4822 526 10097	FXF TUBE	0.00		3B 4.3X2 L=7.2
5322 121 42352	MAINS FILTER	1.00	A	FN326-1/07
5322 130 90413	DISPLAY	0.00		PM6665-69
5322 267 10004	CONNECTOR	0.00		KC-79-35
5322 267 70208	ZEBRA STRIP	0.00		S0.25P100.0L6.0H2.8W
5322 276 60257	PUSH SWITCH	6.00	CELL	PM6665
5322 321 22314	CABLE ASSY	0.00		PM6665-69
5322 401 11102	TILTING SUPPOR	0.00		PM6665-69
5322 414 20034	PUSH BUTTON	0.00	SCHAD	6X10 L-BR/GN 30304
5322 414 30044	KNOB	10.00	MM	BROWN SP=4 NO LINE
5322 414 70016	COVER	8.00	MM	BROWN WH.LINE
5322 450 60633	WINDOW	0.00		FOR LCD 29X101.5
5322 462 41115	REAR FOOT	0.00		PM6665-69
5322 462 41116	BOTTOM FOOT	0.00		PM6665-69
5322 462 41117	RUBBER FOOT	0.00		PM6665-69 18X10X8
5322 498 10263	EXTENSION BAR	0.00		PM6665-69
5322 500 10385	SCREW	0.00		MRX 4X14 ST FZ

PM6665 DATE: 87-05-12

SERVICECODE	DESCRIPTION			ARTICLE SPECIFICATION	POS-NR
BASIC BOARD, U1					
5322 265 40379	CONNECTOR	5.00	POL	22-05-1059 3094-05F	BU101
5322 265 40634	CONNECTOR	12.00	POL	76382-312	BU102
5322 265 64028	CONNECTOR	10.00	POL	22-03-2101 4030-10A	BU103
5322 265 64028	CONNECTOR	10.00	POL	22-03-2101 4030-10A	BU104
5322 265 40197	CONNECTOR	10.00	POL	F095 DOUBLE ROW	BU105
5322 124 10652	CAPACITOR	22.00	UF	6V 195D226X0006F2	C101
5322 122 32453	CAPACITOR	10.00	NF	20% 50V X7R 0805	C102
5322 122 32453	CAPACITOR	10.00	NF	20% 50V X7R 0805	C103
5322 124 10652	CAPACITOR	22.00	UF	6V 195D226X0006F2	C106
5322 122 32453	CAPACITOR	10.00	NF	20% 50V X7R 0805	C107
5322 122 32453	CAPACITOR	10.00	NF	20% 50V X7R 0805	C108
4822 121 41677	CAPACITOR	10.00	NF	10% 400V 3X10 3M	C112
5322 125 50051	CAPACITOR	18.00	PF	2.0-18PF 300V	C113
5322 122 32448	CAPACITOR	10.00	PF	5% 50V NPO 0805	C116
5322 125 50049	CAPACITOR	10.00	PF	1,8-10PF 300V	C117
5322 124 10652	CAPACITOR	22.00	UF	6V 195D226X0006F2	C118
5322 122 34082	CAPACITOR	100.00	NF	20% 50V X7R 1808	C119
5322 122 32452	CAPACITOR	47.00	PF	5% 50V NPO 0805	C120
5322 122 32452	CAPACITOR	47.00	PF	5% 50V NPO 0805	C121
5322 122 34082	CAPACITOR	100.00	NF	20% 50V X7R 1808	C122
5322 124 10653	CAPACITOR	3.30	UF	6V 195D335X0006B2	C123
5322 122 34082	CAPACITOR	100.00	NF	20% 50V X7R 1808	C126
5322 124 41367	CAPACITOR	6800.00	UF	20% 16V ECEA1CU682	C127
5322 124 41366	CAPACITOR	2200.00	UF	20% 16V ECEA1CU222	C128
5322 124 10654	CAPACITOR	1.50	UF	15V 195D155X0015B2	C129
5322 124 10654	CAPACITOR	1.50	UF	15V 195D155X0015B2	C130
5322 124 10653	CAPACITOR	3.30	UF	6V 195D335X0006B2	C131
5322 124 10653	CAPACITOR	3.30	UF	6V 195D335X0006B2	C132
5322 122 32453	CAPACITOR	10.00	NF	20% 50V X7R 0805	C134
5322 122 32453	CAPACITOR	10.00	NF	20% 50V X7R 0805	C135
5322 122 32453	CAPACITOR	10.00	NF	20% 50V X7R 0805	C136
5322 122 32269	CAPACITOR	68.00	PF	5% 50V NPO 0805	C137
5322 122 32532	CAPACITOR	100.00	PF	5% 50V NPO 0805	C138
5322 122 32453	CAPACITOR	10.00	NF	20% 50V X7R 0805	C139
5322 122 32453	CAPACITOR	10.00	NF	20% 50V X7R 0805	C140
5322 122 32268	CAPACITOR	470.00	PF	5% 50V NPO 0805	C141
5322 122 32453	CAPACITOR	10.00	NF	20% 50V X7R 0805	C142
5322 122 32453	CAPACITOR	10.00	NF	20% 50V X7R 0805	C143
5322 122 32453	CAPACITOR	10.00	NF	20% 50V X7R 0805	C144
5322 122 32453	CAPACITOR	10.00	NF	20% 50V X7R 0805	C145
5322 122 34082	CAPACITOR	100.00	NF	20% 50V X7R 1808	C146
5322 122 34123	CAPACITOR	1.00	NF	20% 50V X7R 0805	C147
5322 122 32453	CAPACITOR	10.00	NF	20% 50V X7R 0805	C148
5322 122 32453	CAPACITOR	10.00	NF	20% 50V X7R 0805	C149
5322 122 32453	CAPACITOR	10.00	NF	20% 50V X7R 0805	C152
4822 121 41677	CAPACITOR	10.00	NF	10% 400V 3X10 3M	C153
5322 122 32448	CAPACITOR	10.00	PF	5% 50V NPO 0805	C154
5322 125 50051	CAPACITOR	18.00	PF	2.0-18PF 300V	C155
5322 122 32453	CAPACITOR	10.00	NF	20% 50V X7R 0805	C157
5322 122 32453	CAPACITOR	10.00	NF	20% 50V X7R 0805	C158
5322 125 50049	CAPACITOR	10.00	PF	1,8-10PF 300V	C159
5322 122 32269	CAPACITOR	68.00	PF	5% 50V NPO 0805	C160
5322 122 32532	CAPACITOR	100.00	PF	5% 50V NPO 0805	C161
5322 122 32453	CAPACITOR	10.00	NF	20% 50V X7R 0805	C162
5322 122 32453	CAPACITOR	10.00	NF	20% 50V X7R 0805	C163
5322 122 32268	CAPACITOR	470.00	PF	5% 50V NPO 0805	C164
5322 122 32453	CAPACITOR	10.00	NF	20% 50V X7R 0805	C165
5322 122 32453	CAPACITOR	10.00	NF	20% 50V X7R 0805	C166

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SERVICECODE	DESCRIPTION	ARTICLE SPECIFICATION			POS-NR
5322 122 32453	CAPACITOR	10.00	NF	20% 50V X7R 0805	C167
5322 122 32453	CAPACITOR	10.00	NF	20% 50V X7R 0805	C168
5322 122 34082	CAPACITOR	100.00	NF	20% 50V X7R 1808	C169
5322 122 32453	CAPACITOR	10.00	NF	20% 50V X7R 0805	C170
5322 122 32453	CAPACITOR	10.00	NF	20% 50V X7R 0805	C171
5322 122 32453	CAPACITOR	10.00	NF	20% 50V X7R 0805	C172
5322 122 32453	CAPACITOR	10.00	NF	20% 50V X7R 0805	C173
5322 122 32448	CAPACITOR	10.00	PF	5% 50V NP0 0805	C174
5322 122 32448	CAPACITOR	10.00	PF	5% 50V NP0 0805	C175
5322 130 32739	DIODE	0.35	W	BZX84/C3V0 SOT23	GR101
4822 130 32656	DIODE	0.10	A	BA483 35V SOD-58	GR102
4822 130 32656	DIODE	0.10	A	BA483 35V SOD-58	GR103
5322 130 32739	DIODE	0.35	W	BZX84/C3V0 SOT23	GR104
5322 130 32739	DIODE	0.35	W	BZX84/C3V0 SOT23	GR105
4822 130 32656	DIODE	0.10	A	BA483 35V SOD-58	GR106
4822 130 32656	DIODE	0.10	A	BA483 35V SOD-58	GR107
5322 130 32739	DIODE	0.35	W	BZX84/C3V0 SOT23	GR108
5322 130 34337	DIODE	0.10	A	BAV99 SOT23	GR109
5322 130 30691	DIODE	0.25	A	BAW56 70V SOT23	GR111
5322 130 30691	DIODE	0.25	A	BAW56 70V SOT23	GR112
4822 130 32003	BRIDGE RECTIF	4.00	A	KBL02 200V	GR114
5322 130 30691	DIODE	0.25	A	BAW56 70V SOT23	GR115
5322 130 30691	DIODE	0.25	A	BAW56 70V SOT23	GR117
5322 209 83069	IC	0.00		TLC271CP DIL-8	IC101
5322 209 83069	IC	0.00		TLC271CP DIL-8	IC102
5322 209 71552	IC	0.00		AM687ADL	IC103
5322 209 71559	LSI	0.00		OQ0501	IC104
5322 255 40421	IC-SOCKET	24.00	POL	DIL	IC104
5322 209 51236	IC-MICROP	0.00		PM6665-69 D2764	IC105
5322 209 51241	IC-MICROP	0.00		PM6665-69 D2764	IC105
5322 255 40234	IC-SOCKET	28.00	POL	DIL	IC105
5322 209 84454	IC	5.00	V	MC7805CT 1A TO-220	IC106
5322 130 44843	IC	-5.00	V	MC7905CT 1A TO-220	IC107
5322 209 86203	IC	0.00		MC10138P	IC108
5322 209 70313	IC	0.00		MC10125P	IC109
5322 209 71555	IC	0.00		PC74HC373T SO-20	IC110
5322 265 60251	CONNECTOR	4.00	POL	F095 DOUBLE ROW	JP101
5322 111 90094	RESISTOR	10.00	MOHM	10% 0.25W RC-01 1206	R101
4822 111 90169	RESISTOR	560.00	KOHM	5% 0.25W RC-01 1206	R103
4822 111 90169	RESISTOR	560.00	KOHM	5% 0.25W RC-01 1206	R104
4822 111 90214	RESISTOR	100.00	KOHM	5% 0.25W RC-01 1206	R105
4822 111 90169	RESISTOR	560.00	KOHM	5% 0.25W RC-01 1206	R106
4822 111 90169	RESISTOR	560.00	KOHM	5% 0.25W RC-01 1206	R107
4822 111 90573	RESISTOR	56.00	KOHM	5% 0.25W RC-01 1206	R108
5322 111 90109	RESISTOR	470.00	OHM	5% 0.25W RC-01 1206	R109
5322 111 90098	RESISTOR	150.00	OHM	5% 0.25W RC-01 1206	R110
4822 111 90339	RESISTOR	120.00	OHM	5% 0.25W RC-01 1206	R111
4822 111 90572	RESISTOR	5.60	KOHM	5% 0.25W RC-01 1206	R112
4822 111 90169	RESISTOR	560.00	KOHM	5% 0.25W RC-01 1206	R113
5322 111 90109	RESISTOR	470.00	OHM	5% 0.25W RC-01 1206	R114
5322 111 90094	RESISTOR	10.00	MOHM	10% 0.25W RC-01 1206	R115
4822 111 90214	RESISTOR	100.00	KOHM	5% 0.25W RC-01 1206	R116
5322 101 20941	POTENTIOMETER	1.00	KOHM	PM6665	R117
5322 111 90092	RESISTOR	1.00	KOHM	5% 0.25W RC-01 1206	R118
5322 111 90092	RESISTOR	1.00	KOHM	5% 0.25W RC-01 1206	R119
4822 111 90249	RESISTOR	10.00	KOHM	5% 0.25W RC-01 1206	R121
4822 111 90214	RESISTOR	100.00	KOHM	5% 0.25W RC-01 1206	R122
5322 111 90092	RESISTOR	1.00	KOHM	5% 0.25W RC-01 1206	R123
5322 111 90096	RESISTOR	1.20	KOHM	5% 0.25W RC-01 1206	R125
4822 111 90248	RESISTOR	2.20	KOHM	5% 0.25W RC-01 1206	R126

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SERVICECODE	DESCRIPTION	ARTICLE SPECIFICATION			POS-NR
4822 111 90214	RESISTOR	100.00	KOHM	5% 0.25W RC-01 1206	R127
4822 111 90157	RESISTOR	3.30	KOHM	5% 0.25W RC-01 1206	R128
5322 100 11143	POTENTIOMETER	10.00	KOHM	25% 0.1W 3304X-1-103	R129
5322 111 90267	RESISTOR	33.00	KOHM	5% 0.25W RC-01 1206	R130
5322 100 11144	POTENTIOMETER	500.00	OHM	25% 0.1W OPEN CERM	R131
5322 111 90106	RESISTOR	330.00	OHM	5% 0.25W RC-01 1206	R132
5322 111 90106	RESISTOR	330.00	OHM	5% 0.25W RC-01 1206	R133
5322 111 90109	RESISTOR	470.00	OHM	5% 0.25W RC-01 1206	R134
5322 111 90109	RESISTOR	470.00	OHM	5% 0.25W RC-01 1206	R135
5322 111 90092	RESISTOR	1.00	KOHM	5% 0.25W RC-01 1206	R136
5322 111 90092	RESISTOR	1.00	KOHM	5% 0.25W RC-01 1206	R137
5322 111 90109	RESISTOR	470.00	OHM	5% 0.25W RC-01 1206	R138
5322 111 90094	RESISTOR	10.00	MOHM	10% 0.25W RC-01 1206	R139
4822 111 90169	RESISTOR	560.00	KOHM	5% 0.25W RC-01 1206	R141
4822 111 90169	RESISTOR	560.00	KOHM	5% 0.25W RC-01 1206	R142
4822 111 90573	RESISTOR	56.00	KOHM	5% 0.25W RC-01 1206	R143
4822 111 90178	RESISTOR	220.00	OHM	5% 0.25W RC-01 1206	R144
4822 111 90178	RESISTOR	220.00	OHM	5% 0.25W RC-01 1206	R145
5322 111 90111	RESISTOR	4.70	KOHM	5% 0.25W RC-01 1206	R146
4822 111 90151	RESISTOR	1.50	KOHM	5% 0.25W RC-01 1206	R147
4822 111 90151	RESISTOR	1.50	KOHM	5% 0.25W RC-01 1206	R148
4822 111 90249	RESISTOR	10.00	KOHM	5% 0.25W RC-01 1206	R149
4822 111 90161	RESISTOR	470.00	KOHM	5% 0.25W RC-01 1206	R151
4822 111 90161	RESISTOR	470.00	KOHM	5% 0.25W RC-01 1206	R152
4822 111 90161	RESISTOR	470.00	KOHM	5% 0.25W RC-01 1206	R153
4822 111 90162	RESISTOR	680.00	OHM	5% 0.25W RC-01 1206	R154
4822 111 90169	RESISTOR	560.00	KOHM	5% 0.25W RC-01 1206	R155
5322 111 90098	RESISTOR	150.00	OHM	5% 0.25W RC-01 1206	R156
4822 111 90339	RESISTOR	120.00	OHM	5% 0.25W RC-01 1206	R157
5322 111 90109	RESISTOR	470.00	OHM	5% 0.25W RC-01 1206	R158
4822 111 90214	RESISTOR	100.00	KOHM	5% 0.25W RC-01 1206	R159
4822 111 90169	RESISTOR	560.00	KOHM	5% 0.25W RC-01 1206	R160
4822 111 90214	RESISTOR	100.00	KOHM	5% 0.25W RC-01 1206	R161
5322 111 90092	RESISTOR	1.00	KOHM	5% 0.25W RC-01 1206	R162
5322 111 90092	RESISTOR	1.00	KOHM	5% 0.25W RC-01 1206	R164
5322 101 20941	POTENTIOMETER	1.00	KOHM	PM6665	R165
4822 111 90249	RESISTOR	10.00	KOHM	5% 0.25W RC-01 1206	R166
5322 111 90109	RESISTOR	470.00	OHM	5% 0.25W RC-01 1206	R167
4822 111 90572	RESISTOR	5.60	KOHM	5% 0.25W RC-01 1206	R168
5322 111 90094	RESISTOR	10.00	MOHM	10% 0.25W RC-01 1206	R169
4822 111 90169	RESISTOR	560.00	KOHM	5% 0.25W RC-01 1206	R170
4822 111 90214	RESISTOR	100.00	KOHM	5% 0.25W RC-01 1206	R171
5322 111 90096	RESISTOR	1.20	KOHM	5% 0.25W RC-01 1206	R173
4822 111 90248	RESISTOR	2.20	KOHM	5% 0.25W RC-01 1206	R174
4822 111 90214	RESISTOR	100.00	KOHM	5% 0.25W RC-01 1206	R175
4822 111 90157	RESISTOR	3.30	KOHM	5% 0.25W RC-01 1206	R176
5322 100 11143	POTENTIOMETER	10.00	KOHM	25% 0.1W 3304X-1-103	R177
5322 111 90106	RESISTOR	330.00	OHM	5% 0.25W RC-01 1206	R178
5322 111 90106	RESISTOR	330.00	OHM	5% 0.25W RC-01 1206	R179
5322 111 90092	RESISTOR	1.00	KOHM	5% 0.25W RC-01 1206	R180
5322 111 90109	RESISTOR	470.00	OHM	5% 0.25W RC-01 1206	R181
4822 276 11076	KEY SWITCH	1.00	POL	DW-5112 TYPE VKS	SK103
5322 414 20031	PUSH BUTTON	0.00	VKS	6.5X6.5 L-BR 30304	SK103
5322 277 21124	VOLTAGE SWITCH	0.00		V202-12-MA-08-QA	SK104
5322 276 12192	PUSH SWITCH	1.00	CELL	PM6665-69	SK106
5322 146 21229	TRANSFORMER	0.00		PM6665-69	TR101
5322 130 44787	TRANSISTOR	0.00		BFR31 .01A 25V SOT23	TS101
5322 130 40781	TRANSISTOR	0.00		BFS17 .05A 15V SOT23	TS102
5322 130 44787	TRANSISTOR	0.00		BFR31 .01A 25V SOT23	TS103
5322 130 40781	TRANSISTOR	0.00		BFS17 .05A 15V SOT23	TS104

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FRONT PANEL, U2

SERVICECODE	DESCRIPTION			ARTICLE SPECIFICATION	POS-NR
5322 267 50336	CONNECTOR	10.00	POL	22-14-2104 4455-BC	BU201
5322 122 32453	CAPACITOR	10.00	NF	20% 50V X7R 0805	C201
5322 130 30691	DIODE	0.25	A	BAW56 70V SOT23	GR201
5322 130 30691	DIODE	0.25	A	BAW56 70V SOT23	GR203
5322 130 30691	DIODE	0.25	A	BAW56 70V SOT23	GR204
5322 209 11129	IC	0.00		PCF8576T VSO56	IC201
4822 111 90214	RESISTOR	100.00	KOHM	5% 0.25W RC-01 1206	R201
4822 276 11076	KEY SWITCH	1.00	POL	DW-5112 TYPE VKS	SK201
5322 414 20031	PUSH BUTTON	0.00	VKS	6.5X6.5 L-BR 30304	SK201
4822 276 11076	KEY SWITCH	1.00	POL	DW-5112 TYPE VKS	SK202
5322 414 20031	PUSH BUTTON	0.00	VKS	6.5X6.5 L-BR 30304	SK202
4822 276 11076	KEY SWITCH	1.00	POL	DW-5112 TYPE VKS	SK203
5322 414 60146	PUSH BUTTON	0.00	VKS	6.5X6.5 BEIGE 40317	SK203
4822 276 11076	KEY SWITCH	1.00	POL	DW-5112 TYPE VKS	SK204
5322 414 20031	PUSH BUTTON	0.00	VKS	6.5X6.5 L-BR 30304	SK204
4822 276 11076	KEY SWITCH	1.00	POL	DW-5112 TYPE VKS	SK205
5322 414 20031	PUSH BUTTON	0.00	VKS	6.5X6.5 L-BR 30304	SK205

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SERVICECODE	DESCRIPTION		ARTICLE SPECIFICATION	POS-NR
BASIC BOARD, U1				
5322 265 40379	CONNECTOR	5.00 POL	22-05-1059 3094-05F	BU101
5322 265 40634	CONNECTOR	12.00 POL	76382-312	BU102
5322 265 64028	CONNECTOR	10.00 POL	22-03-2101 4030-10A	BU103
5322 265 64028	CONNECTOR	10.00 POL	22-03-2101 4030-10A	BU104
5322 265 40197	CONNECTOR	10.00 POL	F095 DOUBLE ROW	BU105
5322 121 40308	CAPACITOR	22.00 NF	10% 400V	C101
5322 122 32549	CAPACITOR	3.30 PF	+-0.25PF 500V NP0 2M	C102
5322 122 32269	CAPACITOR	68.00 PF	5% 50V NP0 0805	C103
5322 122 32453	CAPACITOR	10.00 NF	20% 50V X7R 0805	C104
5322 122 32453	CAPACITOR	10.00 NF	20% 50V X7R 0805	C105
5322 122 32453	CAPACITOR	10.00 NF	20% 50V X7R 0805	C106
5322 122 32453	CAPACITOR	10.00 NF	20% 50V X7R 0805	C107
5322 122 33062	CAPACITOR	270.00 PF	10% 500V 2M	C108
5322 122 32453	CAPACITOR	10.00 NF	20% 50V X7R 0805	C109
5322 122 32453	CAPACITOR	10.00 NF	20% 50V X7R 0805	C110
5322 122 34082	CAPACITOR	100.00 NF	20% 50V X7R 1808	C111
5322 122 32452	CAPACITOR	47.00 PF	5% 50V NP0 0805	C112
5322 124 10455	CAPACITOR	68.00 UF	20% 6.3V SOLID AL	C113
5322 122 32453	CAPACITOR	10.00 NF	20% 50V X7R 0805	C114
5322 122 32453	CAPACITOR	10.00 NF	20% 50V X7R 0805	C115
5322 122 32453	CAPACITOR	10.00 NF	20% 50V X7R 0805	C116
5322 124 10652	CAPACITOR	22.00 UF	6V 195D226X0006F2	C118
5322 122 34082	CAPACITOR	100.00 NF	20% 50V X7R 1808	C119
5322 122 32453	CAPACITOR	10.00 NF	20% 50V X7R 0805	C120
5322 122 32452	CAPACITOR	47.00 PF	5% 50V NP0 0805	C121
5322 122 34082	CAPACITOR	100.00 NF	20% 50V X7R 1808	C122
5322 124 10653	CAPACITOR	3.30 UF	6V 195D335X0006B2	C123
5322 122 34082	CAPACITOR	100.00 NF	20% 50V X7R 1808	C126
5322 124 41367	CAPACITOR	6800.00 UF	20% 16V ECEA1CU682	C127
5322 124 41366	CAPACITOR	2200.00 UF	20% 16V ECEA1CU222	C128
5322 124 10654	CAPACITOR	1.50 UF	15V 195D155X0015B2	C129
5322 124 10654	CAPACITOR	1.50 UF	15V 195D155X0015B2	C130
5322 124 10653	CAPACITOR	3.30 UF	6V 195D335X0006B2	C131
5322 124 10653	CAPACITOR	3.30 UF	6V 195D335X0006B2	C132
5322 122 32453	CAPACITOR	10.00 NF	20% 50V X7R 0805	C133
5322 122 32453	CAPACITOR	10.00 NF	20% 50V X7R 0805	C134
5322 122 32453	CAPACITOR	10.00 NF	20% 50V X7R 0805	C135
5322 122 32453	CAPACITOR	10.00 NF	20% 50V X7R 0805	C136
5322 122 32448	CAPACITOR	10.00 PF	5% 50V NP0 0805	C137
5322 122 34082	CAPACITOR	100.00 NF	20% 50V X7R 1808	C138
5322 122 32452	CAPACITOR	47.00 PF	5% 50V NP0 0805	C139
5322 122 32453	CAPACITOR	10.00 NF	20% 50V X7R 0805	C140
5322 122 32453	CAPACITOR	10.00 NF	20% 50V X7R 0805	C171
5322 130 34337	DIODE	0.10 A	BAV99 SOT23	GR101
5322 130 34337	DIODE	0.10 A	BAV99 SOT23	GR103
5322 130 34337	DIODE	0.10 A	BAV99 SOT23	GR109
5322 130 30691	DIODE	0.25 A	BAW56 70V SOT23	GR111
5322 130 30691	DIODE	0.25 A	BAW56 70V SOT23	GR112
4822 130 32003	BRIDGE RECTIF	4.00 A	KBL02 200V	GR114
5322 209 71556	IC	0.00	SP9680 DIL-8	IC101
5322 209 86203	IC	0.00	MC10138P	IC102
5322 209 70313	IC	0.00	MC10125P	IC103
5322 209 71559	LSI	0.00	0Q0501	IC104
5322 255 40421	IC-SOCKET	24.00 POL	DIL	IC104
5322 209 51236	IC-MICROP	0.00	PM6665-69 D2764	IC105
5322 209 51241	IC-MICROP	0.00	PM6665-69 D2764	IC105
5322 255 40234	IC-SOCKET	28.00 POL	DIL	IC105
5322 209 84454	IC	5.00 V	MC7805CT 1A TO-220	IC106

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SERVICECODE	DESCRIPTION	ARTICLE SPECIFICATION	POS-NR
5322 130 44843	IC	-5.00 V MC7905CT 1A TO-220	IC107
5322 209 71555	IC	0.00 PC74HC373T SO-20	IC110
5322 265 60251	CONNECTOR	4.00 POL F095 DOUBLE ROW	JP101
5322 263 50101	CONNECTOR	2.00 POL F095 JUMPER GREY	JP101
5322 265 44074	CONNECTOR	2.00 POL F095 SINGLE ROW	JP102
5322 158 10243	CHOKE	100.00 UH 10% Q=50 1641-104	L101
5322 111 90094	RESISTOR	10.00 MOHM 10% 0.25W RC-01 1206	R101
5322 111 90094	RESISTOR	10.00 MOHM 10% 0.25W RC-01 1206	R102
4822 111 90169	RESISTOR	560.00 KOHM 5% 0.25W RC-01 1206	R103
4822 111 90169	RESISTOR	560.00 KOHM 5% 0.25W RC-01 1206	R104
4822 111 90573	RESISTOR	56.00 KOHM 5% 0.25W RC-01 1206	R105
4822 111 90214	RESISTOR	100.00 KOHM 5% 0.25W RC-01 1206	R106
4822 111 90203	RESISTOR	68.00 OHM 5% 0.25W RC-01 1206	R107
4822 111 90203	RESISTOR	68.00 OHM 5% 0.25W RC-01 1206	R108
4822 111 90214	RESISTOR	100.00 KOHM 5% 0.25W RC-01 1206	R109
4822 111 90249	RESISTOR	10.00 KOHM 5% 0.25W RC-01 1206	R110
4822 111 90249	RESISTOR	10.00 KOHM 5% 0.25W RC-01 1206	R111
5322 111 90106	RESISTOR	330.00 OHM 5% 0.25W RC-01 1206	R112
5322 111 90106	RESISTOR	330.00 OHM 5% 0.25W RC-01 1206	R113
4822 111 90203	RESISTOR	68.00 OHM 5% 0.25W RC-01 1206	R114
4822 111 90203	RESISTOR	68.00 OHM 5% 0.25W RC-01 1206	R115
5322 101 20942	POTENTIOMETER	500.00 OHM PM6669	R116
4822 111 90344	RESISTOR	15.00 OHM 5% 0.25W RC-01 1206	R117
5322 100 11143	POTENTIOMETER	10.00 KOHM 25% 0.1W 3304X-1-103	R118
4822 111 90197	RESISTOR	220.00 KOHM 5% 0.25W RC-01 1206	R119
5322 111 90092	RESISTOR	1.00 KOHM 5% 0.25W RC-01 1206	R120
4822 111 90357	RESISTOR	33.00 OHM 5% 0.25W RC-01 1206	R121
5322 111 90118	RESISTOR	8.20 KOHM 5% 0.25W RC-01 1206	R122
4822 111 90217	RESISTOR	47.00 OHM 5% 0.25W RC-01 1206	R123
5322 111 90109	RESISTOR	470.00 OHM 5% 0.25W RC-01 1206	R124
5322 111 90118	RESISTOR	8.20 KOHM 5% 0.25W RC-01 1206	R125
5322 111 90092	RESISTOR	1.00 KOHM 5% 0.25W RC-01 1206	R126
5322 111 90118	RESISTOR	8.20 KOHM 5% 0.25W RC-01 1206	R127
5322 111 90118	RESISTOR	8.20 KOHM 5% 0.25W RC-01 1206	R128
4822 111 90569	RESISTOR	2.70 KOHM 5% 0.25W RC-01 1206	R129
5322 111 90106	RESISTOR	330.00 OHM 5% 0.25W RC-01 1206	R130
5322 111 90106	RESISTOR	330.00 OHM 5% 0.25W RC-01 1206	R131
5322 111 90092	RESISTOR	1.00 KOHM 5% 0.25W RC-01 1206	R132
5322 111 90092	RESISTOR	1.00 KOHM 5% 0.25W RC-01 1206	R133
5322 111 90109	RESISTOR	470.00 OHM 5% 0.25W RC-01 1206	R134
5322 111 90109	RESISTOR	470.00 OHM 5% 0.25W RC-01 1206	R135
4822 111 90178	RESISTOR	220.00 OHM 5% 0.25W RC-01 1206	R144
4822 111 90178	RESISTOR	220.00 OHM 5% 0.25W RC-01 1206	R145
4822 111 90162	RESISTOR	680.00 OHM 5% 0.25W RC-01 1206	R146
4822 111 90151	RESISTOR	1.50 KOHM 5% 0.25W RC-01 1206	R147
4822 111 90151	RESISTOR	1.50 KOHM 5% 0.25W RC-01 1206	R148
4822 111 90249	RESISTOR	10.00 KOHM 5% 0.25W RC-01 1206	R149
4822 111 90161	RESISTOR	470.00 KOHM 5% 0.25W RC-01 1206	R151
4822 111 90161	RESISTOR	470.00 KOHM 5% 0.25W RC-01 1206	R152
4822 111 90161	RESISTOR	470.00 KOHM 5% 0.25W RC-01 1206	R153
5322 111 90111	RESISTOR	4.70 KOHM 5% 0.25W RC-01 1206	R154
5322 276 11447	PUSH SWITCH	1.00 CELL PM6673-77	SK102
5322 414 20031	PUSH BUTTON	0.00 VKS 6.5X6.5 L-BR 30304	SK103
4822 276 11076	KEY SWITCH	1.00 POL DW-5112 TYPE VKS	SK103
5322 277 21124	VOLTAGE SWITCH	0.00 V202-12-MA-08-QA	SK104
5322 276 12192	PUSH SWITCH	1.00 CELL PM6665-69	SK106
5322 146 21229	TRANSFORMER	0.00 PM6665-69	TR101
5322 130 44343	TRANSISTOR	0.00 BFR30 .01A 25V SOT23	TS101
5322 130 40781	TRANSISTOR	0.00 BFS17 .05A 15V SOT23	TS102

PM6669 DATE: 87-05-12

SERVICECODE	DESCRIPTION	ARTICLE SPECIFICATION	POS-NR
FRONT PANEL, U2			
5322 267 50336	CONNECTOR	10.00 POL 22-14-2104 4455-BC	BU201
5322 122 32453	CAPACITOR	10.00 NF 20% 50V X7R 0805	C201
5322 130 30691	DIODE	0.25 A BAW56 70V SOT23	GR201
5322 130 30691	DIODE	0.25 A BAW56 70V SOT23	GR203
5322 130 30691	DIODE	0.25 A BAW56 70V SOT23	GR204
5322 130 30691	DIODE	0.25 A BAW56 70V SOT23	GR205
5322 209 11129	IC	0.00 PCF8576T VSO56	IC201
4822 111 90214	RESISTOR	100.00 KOHM 5% 0.25W RC-01 1206	R201
5322 414 20031	PUSH BUTTON	0.00 VKS 6.5X6.5 L-BR 30304	SK201
4822 276 11076	KEY SWITCH	1.00 POL DW-5112 TYPE VKS	SK201
5322 414 20031	PUSH BUTTON	0.00 VKS 6.5X6.5 L-BR 30304	SK202
4822 276 11076	KEY SWITCH	1.00 POL DW-5112 TYPE VKS	SK202
5322 414 60146	PUSH BUTTON	0.00 VKS 6.5X6.5 BEIGE 40317	SK203
4822 276 11076	KEY SWITCH	1.00 POL DW-5112 TYPE VKS	SK203
5322 414 20031	PUSH BUTTON	0.00 VKS 6.5X6.5 L-BR 30304	SK204
4822 276 11076	KEY SWITCH	1.00 POL DW-5112 TYPE VKS	SK204
5322 414 20031	PUSH BUTTON	0.00 VKS 6.5X6.5 L-BR 30304	SK205
4822 276 11076	KEY SWITCH	1.00 POL DW-5112 TYPE VKS	SK205
5322 414 20031	PUSH BUTTON	0.00 VKS 6.5X6.5 L-BR 30304	SK206
4822 276 11076	KEY SWITCH	1.00 POL DW-5112 TYPE VKS	SK206

PM6665,-69 DATE: 87-05-12

SERVICECODE	DESCRIPTION	ARTICLE SPECIFICATION			POS-NR
X-TAL OSCILLATOR, U4					
5322 267 54195	CONNECTOR	10.00	POL	22-15-2106 4455-AC	BU404
4822 122 31414	CAPACITOR	10.00	NF	-20/+50% 100V 2M	C401
4822 122 31237	CAPACITOR	82.00	PF	2% 100V NP0 2M	C402
5322 125 54029	CAPACITOR	18.00	PF	2-18PF 300V	C403
4822 122 31063	CAPACITOR	22.00	PF	2% 100V NP0 2M	C404
4822 122 31237	CAPACITOR	82.00	PF	2% 100V NP0 2M	C405
5322 209 11455	IC	0.00		MM74HCU04N	IC401
5322 242 74163	CRYSTAL	10.00	MHZ	PM9677 HC-49U	KT401
5322 116 55535	RESISTOR	1.00	MOHM	1% 0.4W MR25	R401
5322 116 55274	RESISTOR	215.00	OHM	1% 0.4W MR25	R402
4822 116 53108	RESISTOR	1.00	KOHM	1% 0.5W MRS25	R403
4822 116 53022	RESISTOR	10.00	KOHM	1% 0.5W MRS25	R404

/.3. oscillator (MTCXO)

Repair of this oscillator cannot be carried out by the local service organization so no spare parts are available. The complete oscillator unit must be sent to the factory for repair.

Contact your local Philips organization.

PM9604 GPIB DATE: 87-05-11

SERVICECODE	DESCRIPTION			ARTICLE SPECIFICATION	POS-NR
5322 267 60148	CONNECTOR	24.00	POL	57LE-20240-7700D35G	BU101
5322 321 22315	CABLE ASSY			PM9604	BU102
5322 124 14075	CAPACITOR	1.00	UF	20% 40V (25V) SOL AL	C1
5322 121 42525	CAPACITOR	470.00	NF	10% 63V MMKO-5 PETP	C2
5322 121 42525	CAPACITOR	470.00	NF	10% 63V MMKO-5 PETP	C3
4822 122 31414	CAPACITOR	10.00	NF	-20/+50% 100V 2M	C4
4822 122 31414	CAPACITOR	10.00	NF	-20/+50% 100V 2M	C5
4822 122 31414	CAPACITOR	10.00	NF	-20/+50% 100V 2M	C6
4822 130 30621	DIODE	0.20	A	1N4148/75 DO-35	GR1
5322 255 40233	IC-SOCKET	40.00	POL	DIL	IC1
5322 209 81264	IC			P8291A TALK/LISTEN	IC1
5322 209 51242	IC			PM9604 D2764	IC2
5322 255 40234	IC-SOCKET	28.00	POL	DIL	IC2
5322 209 71577	IC			MAB8400B DIL-28	IC2
5322 209 81842	IC			SN75161AN	IC3
5322 209 81807	IC			SN75160AN	IC4
4822 209 10317	IC			HEF40097BP	IC5
5322 209 84454	IC	5.00	V	MC7805CT 1A TO-220	IC6
5322 111 94031	RES. NETWORK	47.00	KOHM	10%x6 1/8W	R1
5322 116 53232	RESISTOR	464.00	OHM	1% 0.5W MRS25	R8
5322 277 21125	DIP SWITCH	6.00	POL	206-6 RAST	SW1
4822 130 40824	TRANSISTOR			BD136 1.5A 45V TO-126	TS1

PM9608 PRESCALER DATE: 87-05-11

SERVICECODE	DESCRIPTION	ARTICLE SPECIFICATION	POS-NR
5322 321 22313	CABLE ASSY	0.00 PM9608 PRESCAL	
5322 267 60199	CONNECTOR	0.00 R 114426 SMB	BU301
5322 290 30191	SOLDERING PIN	2.80 MM E242.5 SN	BU302
5322 267 54195	CONNECTOR	10.00 POL 22-15-2106 4455-AC	BU303
5322 290 30191	SOLDERING PIN	2.80 MM E242.5 SN	BU304
5322 122 32532	CAPACITOR	100.00 PF 5% 50V NP0 0805	C301
5322 122 34123	CAPACITOR	1.00 NF 20% 50V X7R 0805	C302
5322 122 34123	CAPACITOR	1.00 NF 20% 50V X7R 0805	C303
5322 122 32453	CAPACITOR	10.00 NF 20% 50V X7R 0805	C304
5322 122 34123	CAPACITOR	1.00 NF 20% 50V X7R 0805	C305
5322 122 34123	CAPACITOR	1.00 NF 20% 50V X7R 0805	C306
5322 122 32452	CAPACITOR	47.00 PF 5% 50V NP0 0805	C307
5322 122 34123	CAPACITOR	1.00 NF 20% 50V X7R 0805	C308
5322 122 32451	CAPACITOR	4.70 PF 5% 50V NP0 0805	C310
5322 122 34123	CAPACITOR	1.00 NF 20% 50V X7R 0805	C311
5322 122 34123	CAPACITOR	1.00 NF 20% 50V X7R 0805	C312
5322 122 32448	CAPACITOR	10.00 PF 5% 50V NP0 0805	C313
5322 122 34123	CAPACITOR	1.00 NF 20% 50V X7R 0805	C314
5322 122 33063	CAPACITOR	2.20 PF 5% 50V NP0 0805	C316
5322 122 34123	CAPACITOR	1.00 NF 20% 50V X7R 0805	C317
5322 122 32453	CAPACITOR	10.00 NF 20% 50V X7R 0805	C318
5322 122 32453	CAPACITOR	10.00 NF 20% 50V X7R 0805	C319
5322 122 32453	CAPACITOR	10.00 NF 20% 50V X7R 0805	C320
5322 122 32453	CAPACITOR	10.00 NF 20% 50V X7R 0805	C321
5322 122 32453	CAPACITOR	10.00 NF 20% 50V X7R 0805	C322
5322 122 32446	CAPACITOR	470.00 NF 20% 50V X7R 2220	C323
5322 122 34123	CAPACITOR	1.00 NF 20% 50V X7R 0805	C324
5322 122 32453	CAPACITOR	10.00 NF 20% 50V X7R 0805	C325
5322 122 32453	CAPACITOR	10.00 NF 20% 50V X7R 0805	C326
5322 122 32453	CAPACITOR	10.00 NF 20% 50V X7R 0805	C327
5322 130 31544	DIODE	0.03 A BAT17 SOT23	GR303
5322 130 31544	DIODE	0.03 A BAT17 SOT23	GR304
5322 130 31544	DIODE	0.03 A BAT17 SOT23	GR305
5322 130 31544	DIODE	0.03 A BAT17 SOT23	GR306
5322 130 31544	DIODE	0.03 A BAT17 SOT23	GR307
5322 130 34337	DIODE	0.10 A BAV99 SOT23	GR308
5322 130 31544	DIODE	0.03 A BAT17 SOT23	GR309
5322 130 80246	DIODE	0.00 BAR 16-1 SOT23	GR311
5322 130 34337	DIODE	0.10 A BAV99 SOT23	GR313
5322 209 71557	IC	1.20 GHZ UPC1652G SO-8 VAR	IC301
5322 209 71554	IC	1.00 GHZ SAB1256P /256 DIL-8	IC302
5322 209 71553	IC	0.00 NE532D DUAL SO-8	IC303
5322 157 52689	CHOKE	0.10 UH 10% MLF3216DR10K	L301
5322 157 52689	CHOKE	0.10 UH 10% MLF3216DR10K	L307
5322 111 90109	RESISTOR	470.00 OHM 5% 0.25W RC-01 1206	R301
5322 111 90109	RESISTOR	470.00 OHM 5% 0.25W RC-01 1206	R302
5322 111 90109	RESISTOR	470.00 OHM 5% 0.25W RC-01 1206	R303
4822 111 90186	RESISTOR	22.00 OHM 5% 0.25W RC-01 1206	R304
4822 111 90186	RESISTOR	22.00 OHM 5% 0.25W RC-01 1206	R305
4822 111 90186	RESISTOR	22.00 OHM 5% 0.25W RC-01 1206	R306
4822 111 90186	RESISTOR	22.00 OHM 5% 0.25W RC-01 1206	R307
4822 111 90186	RESISTOR	22.00 OHM 5% 0.25W RC-01 1206	R308
4822 111 90186	RESISTOR	22.00 OHM 5% 0.25W RC-01 1206	R309
4822 111 90154	RESISTOR	270.00 OHM 5% 0.25W RC-01 1206	R310
5322 111 90106	RESISTOR	330.00 OHM 5% 0.25W RC-01 1206	R311
5322 111 90106	RESISTOR	330.00 OHM 5% 0.25W RC-01 1206	R312
4822 111 90397	RESISTOR	8.20 OHM 10% 0.25W RC-01 1206	R313
5322 111 90098	RESISTOR	150.00 OHM 5% 0.25W RC-01 1206	R314
4822 111 90397	RESISTOR	8.20 OHM 10% 0.25W RC-01 1206	R315
4822 111 90178	RESISTOR	220.00 OHM 5% 0.25W RC-01 1206	R316

PM9608 PRESCALER DATE: 87-05-11

SERVICECODE	DESCRIPTION	ARTICLE SPECIFICATION			POS-NR
4822 111 90217	RESISTOR	47.00	OHM	5% 0.25W RC-01 1206	R319
5322 111 90095	RESISTOR	10.00	OHM	5% 0.25W RC-01 1206	R320
4822 111 90217	RESISTOR	47.00	OHM	5% 0.25W RC-01 1206	R321
4822 111 90217	RESISTOR	47.00	OHM	5% 0.25W RC-01 1206	R322
5322 111 90091	RESISTOR	100.00	OHM	5% 0.25W RC-01 1206	R324
4822 111 90569	RESISTOR	2.70	KOHM	5% 0.25W RC-01 1206	R325
4822 111 90543	RESISTOR	47.00	KOHM	5% 0.25W RC-01 1206	R326
4822 111 90248	RESISTOR	2.20	KOHM	5% 0.25W RC-01 1206	R327
4822 111 90154	RESISTOR	270.00	OHM	5% 0.25W RC-01 1206	R328
5322 111 90106	RESISTOR	330.00	OHM	5% 0.25W RC-01 1206	R329
5322 101 14299	POTENTIOMETER	1.00	KOHM	10% 72X	R330
4822 111 90543	RESISTOR	47.00	KOHM	5% 0.25W RC-01 1206	R331
5322 111 90111	RESISTOR	4.70	KOHM	5% 0.25W RC-01 1206	R332
4822 111 90157	RESISTOR	3.30	KOHM	5% 0.25W RC-01 1206	R333
4822 111 90214	RESISTOR	100.00	KOHM	5% 0.25W RC-01 1206	R335
5322 111 90111	RESISTOR	4.70	KOHM	5% 0.25W RC-01 1206	R336
4822 111 90157	RESISTOR	3.30	KOHM	5% 0.25W RC-01 1206	R337
5322 111 90111	RESISTOR	4.70	KOHM	5% 0.25W RC-01 1206	R338
4822 111 90157	RESISTOR	3.30	KOHM	5% 0.25W RC-01 1206	R339
5322 111 90267	RESISTOR	33.00	KOHM	5% 0.25W RC-01 1206	R340
5322 111 90111	RESISTOR	4.70	KOHM	5% 0.25W RC-01 1206	R341
5322 111 90092	RESISTOR	1.00	KOHM	5% 0.25W RC-01 1206	R342
5322 111 90113	RESISTOR	560.00	OHM	5% 0.25W RC-01 1206	R343
5322 111 90091	RESISTOR	100.00	OHM	5% 0.25W RC-01 1206	R344
5322 111 90376	RESISTOR	4.70	OHM	10% 0.25W RC-01 1206	R345
5322 111 90109	RESISTOR	470.00	OHM	5% 0.25W RC-01 1206	R347
4822 111 90339	RESISTOR	120.00	OHM	5% 0.25W RC-01 1206	R348
4822 111 90569	RESISTOR	2.70	KOHM	5% 0.25W RC-01 1206	R349
4822 111 90569	RESISTOR	2.70	KOHM	5% 0.25W RC-01 1206	R350
5322 111 90267	RESISTOR	33.00	KOHM	5% 0.25W RC-01 1206	R351
5322 111 90111	RESISTOR	4.70	KOHM	5% 0.25W RC-01 1206	R352
4822 111 90249	RESISTOR	10.00	KOHM	5% 0.25W RC-01 1206	R353
5322 111 90376	RESISTOR	4.70	OHM	10% 0.25W RC-01 1206	R354
5322 130 42567	TRANSISTOR	0.00		BFQ67 SOT23	TS301
5322 130 42567	TRANSISTOR	0.00		BFQ67 SOT23	TS302
4822 130 60511	TRANSISTOR	0.00		BC847B .1A45V SOT23	TS303
4822 130 60511	TRANSISTOR	0.00		BC847B .1A45V SOT23	TS304
5322 130 60508	TRANSISTOR	0.00		BC857B .1A45V SOT23	TS305
5322 130 60508	TRANSISTOR	0.00		BC857B .1A45V SOT23	TS306

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Danmark: Philips A/S,
Strandlodsvej 4,
P.O. Box 1919, 2300 København S;
tel. 45-1-572222

Deutschland (Bundesrepublik)**:** Philips GmbH,
Unternehmensbereich Elektronik für
Wissenshaft und Industrie, Miramstrasse 87,
Postfach 310 320, 3500 Kassel-Bettenhausen;
tel. 49-561-5010

Ecuador: Philips Ecuador C.A.,
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Egypt: Philips Egypt Branch of Philips Midden Oosten N.V.
10, Abdel Rahman el Rafeistreet, P.O. Box 1687, Cairo;
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Apartado 2065, Madrid 28027;
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Service Centre:
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Division Science et Industrie,
105 Rue de Paris, B.P.62, 93 002 Bobigny Cedex
tel. 33-1-8301111

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Hellas: Philips S.A. Hellénique,
54 Avenue Syngrou, P.O. Box 3153,
Athens 10210 ; tel. 30-1- 9215311

Hong Kong: Philips Hong Kong Ltd.,
29/F Hopewell Centre,
17, Kennedy Road, G.P.O. Box 2108,
Hong Kong,
tel. 852-2-283298

India: Peico Electronics & Electricals Ltd.,
I&E Equipment, Shivsagar Estate,
Block "A", Dr. Annie Besant Road,
P.O.B. 6598, Worli, Bombay 400 018 (WB);
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Iran: Philips Iran Ltd., P.O.B. 11365-3891, Teheran;
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P.O. Box 12163, Petaling Jaya, Selangor
Kuala Lumpur; tel. 60-3-554411
Service Centre:
76, Jalan University
Petaling Jaya
Tel.: 60-3-562144

México: Telecommunicaciones y
Sistemas Professionales S.A. de C.V.,
Poniente 152, Nbr. 659
Col. industrial Vallejo
02300 Mexico D.F.,
Tel.: 52-5-5874477

Morocco: Philips Maroc S.A., 304-Boulevard Mohammed V,
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5600 PD Eindhoven; tel. 31-40-793333

Ned. Antillen: Philips Antillana N.V.,
Schottegatweg Oost 146,
Postbus 3523, Willemstad, Curaçao;
tel. 599-9-615277/612799

New Zealand: Philips New Zealand Ltd.,
Scientific and Industrial Equipment Division,
68-86 Jervois Quay, G.P.O. Box 2097,
Wellington; tel. 64-4-735735

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Postboks 1, Manglerud, N 0680 Oslo 6; tel. 47-2-680200

Oesterreich: Oesterreichische Philips Industrie GmbH,
Abteilung Industrie Elektronik,
Triesterstrasse 64,
Postfach 217, A1100 Wien;
tel. 43-222-645521/629141

Pakistan: Philips Electrical Co. of Pakistan Ltd.,
P.O.B. 7101,
Karachi 3; tel. 92-21-725772

Paraguay: Philips del Paraguay S.A.,
Av. Artigas 1519,
Casilla de Correo 605, Asunción;
tel. 595-21-291924/291934

Perú: Philips Peruana S.A.,
Av. Alfonso Ugarte 1268, Lima 5,
Apartado Aereo 1841, Lima 100; tel. 51-14-326070

Philippines: Philips Industrial Development Inc.,
2246 Pasong Tamo,
Makati, Metro Manila, tel. 63-2-868951/868959

Portugal: Philips Portuguesa S.A.R.L.,
1009 Lisboa Codex, Av. Eng. ^{o} Duarte Pacheco 6, 1000 Lisboa;
tel. 351-1-683121/9
Service Centre:
Servicos Técnicos Profissionais, Outurela/Carnaxide, P.O.Box 55
2795 Linda-a-Velha; tel. 351-1-2180071

Saoudi Arabia: Delegate Office of Philips Industries,
Sabreen Bldg., Airport Road, P.O. Box 9844,
Riyadh; tel. 966-1-4777808/4778463/4778216/4778335

Schweiz-Suisse-Svizzera: Philips A.G.,
Allmendstrasse 140, Postfach 670, CH-8027 Zürich;
tel. 41-1- 4882211

Singapore: Philips Project Development(S) Pte. Ltd.,
Lorong 1, Tao Payoh, 1st floor,
P.O. Box 340, Toa Payoh Central Post Office,
Singapore 9131; tel. 65-2538811

South Africa: South African Philips (Pty) Ltd.,
2 Herb Street, New Doornfontein, P.O.B. 7703,
Johannesburg 2000; tel. 27-11-6179111

South-Korea: Philips Electronics (Korea) Ltd.,
260-199, Itaewon-dong, Yongsan-ku,
C.P.O. Box 3680, Seoul; tel. 794 5011/5

Suomi: Oy Philips AB.,
Kaivokatu 8,
P.O. Box 255,
SF-00101 Helsinki 10; tel. 358-0-17271
Service Centre:
Sinikalliontie 1-3,
P.O. Box 11, SF-02630 Espoo;
tel. 358-0-523122

Sverige: Philips Försäljning AB,
Div. Industrielektronik, Tegeluddsvägen 1,
Fack, S11584 Stockholm; tel. 46-8-7821000

Syria: Philips Moyen-Orient S.A.R.L., Rue Fardoss 79,
B.P. 2442, Damas;
tel. 221650/218605/228003/221025

Taiwan: Philips Taiwan Ltd.,
150, Tun Hya North Road,
P.O. Box 22978, Taipei;
tel. 886-2-712-0500

Tanzania: Philips (Tanzania) Ltd.,
T.D.F.L. Building (1ST floor), Ohio/Upanga Road
P.O. Box. 20104, Dar es Salaam; tel. 29571/4

Thailand: Philips Electrical Co. of Thailand Ltd.,
283 Silom Road, P.O. Box 961, Bangkok 10500;
tel. 66-2-2336330.9/2355665.8

Tunisia: S.T.I.E.T., 32 bis, Rue Ben Ghedhahem,
Tunis; tel. 216-1-348666

Türkiye: Türk Philips Ticaret A.S.,
Inönü Caddesi 78/80
Posta Kutusu 504, Beyoglu,
Istanbul ; tel. 90-1-1435910

United Arab Emirates: Philips Middle East B.V.,
Dubai International Trade Centre, Level 11,
P.O. Box 9269, Dubai; tel. 971-4-37700

United Kingdom: Pye Unicam Ltd., York Street,
Cambridge CB1-2PX; tel. 44-223-358866
Service Centre:
Pye Unicam Ltd.,
Service Division,
Beddington Lane,
Croydon CR9-4EN;
Tel.: 44-1-6843670

Uruguay: Industrias Philips del Uruguay S.A.,
Avda Uruguay 1287, Casilla de Correo 294,
Montevideo; tel. 915641/2/3/4-919009
Service 387777-387878-388484

U.S.A.:
Philips Test and Measurement Department Inc.,
California, Garden Grove 92645
12882 Valley View Street, Suite 9;
tel.: (213) 594-8741/(714) 898-5000
California, Milpitas 95035
477 Valley Way;
tel. (408) 946-6722
Florida, Winter Park 32789
1850 Lee Road, Suite 229;
tel. (305) 628-1717
Illinois, Itasca 60143
500 Park Blvd., Suite 1170,
tel. (312) 773-0616
Massachusetts, Woburn 01801
21 Olympia Avenue;
tel. (617) 935-3972
Minnesota, Minneapolis 55420
7851 Metro Parkway, Suite 302;
tel. (612) 854-2426
New Jersey, Mahwah 07430
85 McKee Drive;
tel. 1-201-5293800, Toll-free 800-6317172

Venezuela: Industrias Venezolanas Philips S.A.,
Av. Diego Cisneros, Edificio Centro Colgate,
Apartado Aereo 1167, Caracas 1010-A;
tel. 58-2-2393811/2392222/2393933

Zaire: S.A.M.E./s.a.r.l., 137, Boulevard du 30 juin,
B.P. 16636, Kinshasa;
tel. 31887-31888-31921

Zambia: Philips Electrical Zambia Ltd.,
Mwenbeshi Road, P.O.B. 31878, Lusaka;
tel. 218511/218701

Zimbabwe: Philips Electrical (Pvt) Ltd.,
62 Mutare Road, P.O. Box 994, Harare;
tel. 47211/48031

For information on change of address:
Philips Export B.V.,
Scientific and Industrial Equipment Division,
Test and Measurement, Building TQ III-4, P.O. Box 218,
5600 MD Eindhoven - The Netherlands
Tel. 31-40-784506

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Test and Measurement, Building HBS, P.O. Box 218,
5600 MD Eindhoven - The Netherlands;
Tel. 31-40-755546

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